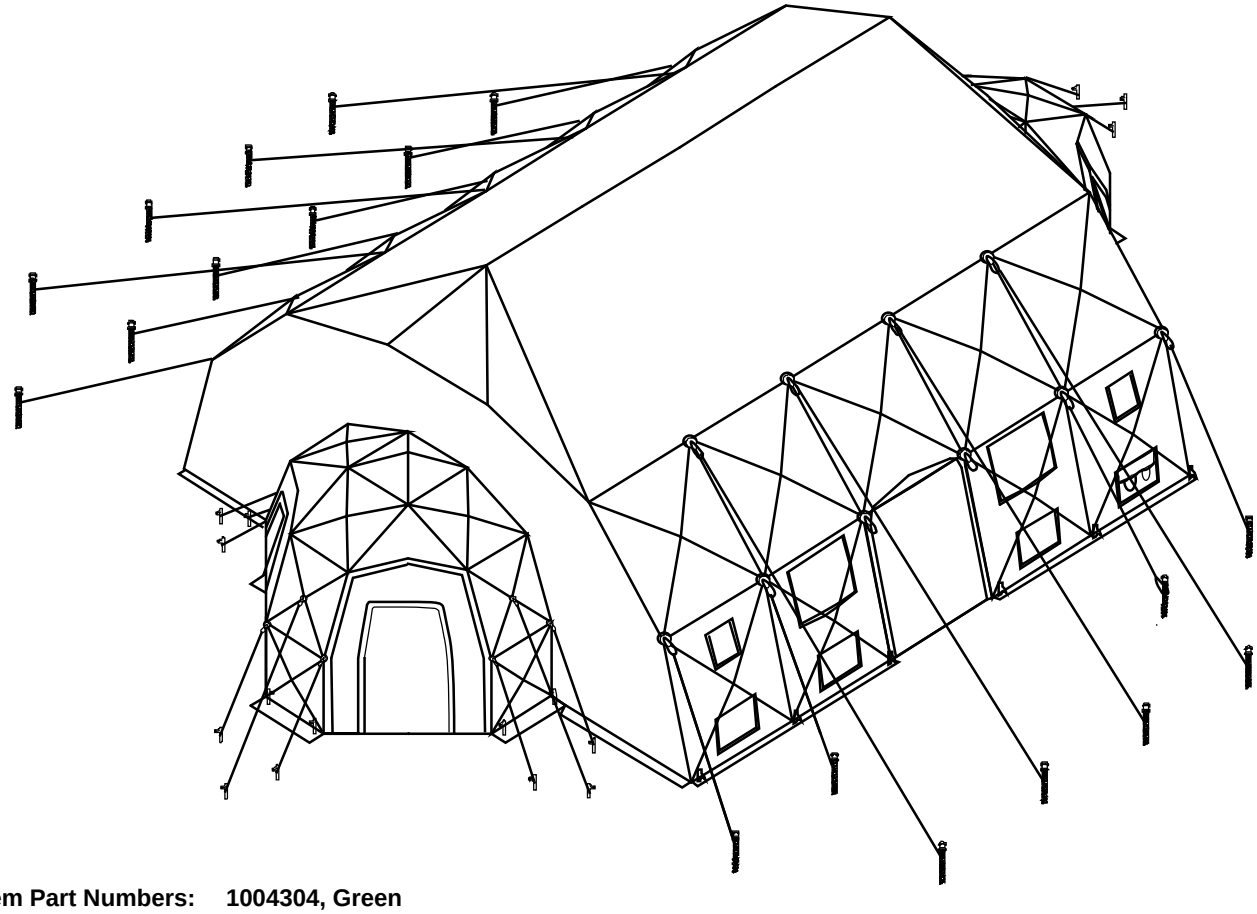
TECHNICAL MANUAL

OPERATOR AND FIELD MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

FOR

J SHELTER MANUAL

(J SHELTER)



System Part Numbers: **1004304, Green**
1004086, Tan

DHS SYSTEMS LLC

ISO 9001: 2000 Registered Quality Management System

Fax: 845-365-2114

Hotline: 800-977-3647

Web: **www.drash.com**

Email: drash@drash.com

TECH MANUAL PART NUMBER: 1006408

27 AUG 10

This document contains information proprietary to DHS Technologies LLC and its subsidiaries and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Technologies LLC.

SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK.

1. SEND FOR HELP AS SOON AS POSSIBLE.

2. DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL.

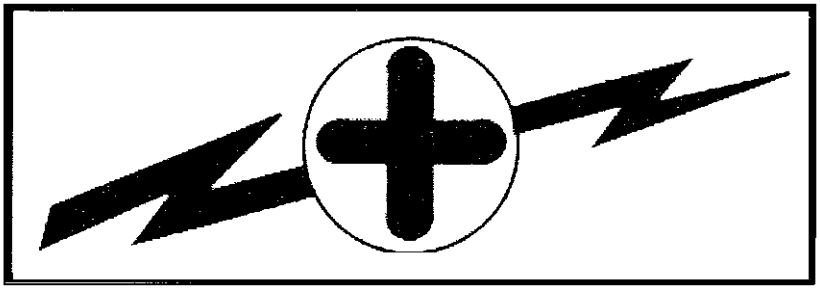
3. IF POSSIBLE, TURN OFF THE ELECTRICAL POWER.

4. IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH OR LIFT THE PERSON TO SAFETY USING A DRY WOODEN POLE, OR A DRY ROPE, OR SOME OTHER INSULATING MATERIAL.

5. AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

WARNING



HIGH VOLTAGE

is used in operation of this equipment.

DEATH ON CONTACT

may result if personnel fail to observe safety precautions.

Never work on electronic equipment unless there is another person nearby who is familiar with operation and hazards of the equipment and who is competent in administering first aid. When operators aid the technician, the technician must warn operators about dangerous areas.

When possible, shut off power supply to equipment before beginning work on equipment. Take particular care to ground every capacitor that could potentially store a dangerous electrical charge. Turn off power when working inside equipment. Always ground every part of equipment before touching it.

Be careful to not contact high-voltage connections or 115 VAC input connections when installing or operating equipment.

Whenever the nature of operation permits, keep one hand away from equipment to reduce hazard of current flowing through the body.

WARNING: Do not be misled by the term “low voltage.” Under adverse conditions, potentials as low as 50 volts may cause death.

For Artificial Respiration, refer to FM 4-25.11.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

ELECTRICAL HAZARD

Under adverse conditions, voltage used in equipment within the shelter can cause death or serious injury. Observe the following safety precautions:

GROUND THE EQUIPMENT Before connecting primary power cables; connect grounding cable from ground lug on power control box to earth ground. Do not remove grounding cable until signal cables and primary power cables have been disconnected and power source has been shut down.

AVOID THE POWER INPUT Be careful not to contact 115 VAC input connections when installing or servicing equipment.

DO NOT SERVICE ALONE Never work on equipment unless there is another person nearby who is familiar with operation and hazards of equipment and who can administer first aid.

USE ONLY ONE HAND Whenever possible, use only one hand to service equipment. Keep other hand away to reduce hazard of current flowing through vital organs of the body.

WARNING

BURN HAZARD

Equipment and power source may be hot to touch. Allow unit to cool before handling or use gloves when handling. Serious injury or death from burns or scalding could result from contact with high-pressure steam and/or liquid. Failure to observe this warning can result in serious injury.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

WARNING

HEAVY EQUIPMENT

Improperly lifting or carrying heavy equipment can result in serious injury or death. Refer to the following weight limits as guidelines:

Handling Function	One-Person Max. Lift	Two-Person Max. Lift	Two-Person Max. Lift (Male Only)
Lift object from floor and place it on surface not greater than 5 feet above floor.	37 lb.	74 lb.	112 lb.
Lift object from floor and place it on surface not greater than 3 feet above floor.	44 lb.	88 lb.	174 lb.
Carry object 33 feet or less.	42 lb.	84 lb.	164 lb.

WARNING

Do not operate power unit generator sets inside the shelter unless exhaust discharge is properly vented to the outside. Exhaust discharge contains noxious and deadly fumes that can cause death or serious injury.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TABLE OF CONTENTS - Continued

WP Sequence No.
Page No.

Warning Summary

How to Use This Manual

Chapter 1 – General Information, Equipment Description, and Theory of Operation

General Information..... WP 0001

Figure 1. J SHELTER System Configuration..... 0001-1

Table 1. Nomenclature Cross-Reference List 0001-3

Table 2. Abbreviations/Acronyms..... 0001-4

Equipment Description and Data ..... WP 0002

Figure 1. J SHELTER 0002-1

Figure 2. J SHELTER Major Components..... 0002-2

Figure 3. J SHELTER Connector Set (End to End)..... 0002-3

Figure 4. J SHELTER Boot Connector 0002-3

Theory of Operation ..... WP 0003

Chapter 2 – Operator Instructions

Operation Under Usual Conditions – Site Preparation ..... WP 0004

Figure 1. J SHELTER System Deployment Footprint 0004-1

Figure 2. Shelter Pre-Deployment Footprint.....0004-2

Operation Under Usual Conditions .....WP 0005

Figure 1. Position Bladder 0005-1

Figure 2. Shelter Centered on Bladder.....0005-3

Figure 3. Spread the Shelter.....0005-5

Figure 4. Attach High Wind Lines and Blower/Duct 0005-6

Figure 5. Open Bladder Zippers 0005-7

Figure 6. Staking Plate Position 0005-8

Figure 7. Place Stakes and Secure Wind Lines 0005-9

Figure 8. Fold Bladder in Thirds 0005-10

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TABLE OF CONTENTS - Continued

WP Sequence No.
Page No.

Figure 9. Finish Shelter T Plate Connections 0005-11

Figure 10. End Cap Lifting Points 0005-12

Figure 11. Raise and Set End Cap on Push Poles 0005-12

Figure 12. End Cap Positioned Next to Main Shelter 0005-13

Figure 13. Attach Floor to Shelter 0005-14

Figure 14. Components of One Complete Internal Load Support 0005-15

Figure 15. Join Vertical Posts to Horizontal Post 0005-16

Figure 16. Internal Load Support in Position in Shelter 0005-16

Figure 17. Align Internal Load Support Clevis with Eyebolt on Shelter 0005-17

Figure 18. J SHELTER Connector Set (End-to-End) to Side Doors 0005-19

Figure 19. J SHELTER Connector Set (End-to-End) to Legacy Style SICPS . 0005-20

Figure 20. J SHELTER Boot Connector 0005-21

Figure 21, Connect Ducts to Shelter. 0005-22

Figure 22 Install Plenum 0005-23

Figure 23 Location of PDU inside Shelter 0005-24

Figure 24 Power Cable Sleeves on Shelter 0005-25

Figure 25. Secure End Caps with Belts 0005-30

Figure 26. Bladder Fully Inflated and Supporting Shelter 0005-31

Figure 27. Pull and Lift Shelter Outward 0005-32

Figure 28. Compress Shelter 0005-33

Figure 29. Packing Main Shelter 0005-34

Figure 30. Remove Air and Fold Bladder 0005-35

Operation Under Unusual Conditions ..... WP 0006

Figure 1. Additional Internal Load Supports 0006-2

Emergency Procedures ..... WP 0007

Chapter 3 – Crew Troubleshooting Procedures

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TABLE OF CONTENTS - Continued

WP Sequence No.
Page No.

Crew Troubleshooting Index ..... WP 0008

Table 1. Crew Troubleshooting Index 0008-1

Shelter (Mechanical) Troubleshooting Procedures ..... WP 0009

Table 1. Crew Troubleshooting – Shelter (Mechanical) 0009-1

Chapter 4 - Crew Maintenance Instructions

Service Upon Receipt ..... WP 0010

PMCS ..... WP 0011

Shelter – Cover ..... WP 0012

Figure 1. Repair of Shelter Cover 0012-3

Figure 2. Main Shelter Exterior Cover Removal/Replacement 0012-5

Figure 3. Main Shelter Keeper and Wind Line Locations 0012-6

Figure 4. Main Shelter Interior Cover Removal/Replacement 0012-9

Figure 5. End Cap Cover Removal/Replacement 0012-12

Shelter – Strut ..... WP 0013

Figure 1. Field Repair of Shelter Strut 0013-3

Figure 2. Main Shelter Struts Removal/Replacement 0013-6

Figure 3. End Cap Strut Removal/Replacement 0013-9

Shelter – Hub, Keeper Staking Bracket ..... WP 0014

Figure 1. Shelter Keepers Removal/Replacement 0014-3

Figure 2. Shelter Hub Removal/Replacement 0014-6

Figure 3. Main Staking Bracket Removal/Replacement 0014-8

Shelter – Internal Load Support and Bladder repair ..... WP 0015

Figure 1. Internal Load Support and Eye Bolt Removal/Replacement 0015-4

Figure 2. Bladder Repair 0015-5

Figure 3. Bladder Zipper Repair 0015-6

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TABLE OF CONTENTS - Continued

WP Sequence No.
Page No.

Chapter 5 – Maintainer Troubleshooting Procedures

Shelter (Electrical) Troubleshooting Procedures ..... WP 0016

Table 1. Maintainer Maintenance Checks and Services – Shelter Electrical..... 0016-1

Chapter 6 – Parts Information

Main Shelter Installation, 1004304, 1004086 ..... WP 0017

Figure 1. J Shelter Installation, 1004304, 1004086 0017-1

Soft Wall, Shelter, JA201420, JA201400..... WP 0018

Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 1 of 5)..... 0018-1

Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 2 of 5)..... 0018-2

Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 3 of 5)..... 0018-3

Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 4 of 5)..... 0018-4

Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 5 of 5)..... 0018-5

End Cap, Shelter, SH201-0001G, SH201-0001T ..... WP 0119

Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 1 of 3)..... 0019-2

Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 2 of 3)..... 0019-3

Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 3 of 3)..... 0019-4

Internal Load Supports, SH490-9004 ..... WP 0020

Figure 4. Internal Load Supports, JA200520 0020-2

Shelter Doors and Connector Set, JA200300, JA200320 ..... WP 0021

Figure 5. Shelter Doors and Connector Set, JA200300, JA200320 0021-2

National Stock Number Index ..... WP 0022

Part Number Index..... WP 0023

Chapter 7 – Destruction of Equipment to Prevent Enemy Use

General Information ..... WP 0024

Destruction Procedures ..... WP 0025

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TABLE OF CONTENTS - Continued

WP Sequence No.
Page No.

Chapter 8 – Supporting Information

References ..... WP 0026

MAC Introduction ..... WP 0027

Maintenance Allocation Chart (MAC) ..... WP 0028

Table 1. MAC for J Shelter 0028-1

Table 2. Tools and Test Equipment for J Shelter 0028-2

Table 3. Remarks for TMSS Large 0028-2

Components of End Item (COEI) and Basic Issue Items (BII) List ..... WP 0029

Table 1. Components of End Item List 0029-2

Table 2. Basic Issue Items 0029-4

Additional Authorization List (AAL) ..... WP 0030

Table 1. Additional Authorization List 0030-2

Expendable and Durable Items List ..... WP 0031

Table 1. Expendable and Durable Items List 0031-1

Table 2. Shelter Repair Kit Items 0031-2

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

HOW TO USE THIS MANUAL

PURPOSE AND SCOPE

This technical manual provides Crew and Maintainer level maintenance information for Trailer Mounted Support System LARGE. To simplify the discussions, the Trailer Mounted Support System Large will be referred to throughout this manual as the J SHELTER used in support of the Command Post Platform (CPP). The information includes equipment description and theory of operation, Operator instructions, troubleshooting procedures, maintenance and testing procedures, and supporting data including Repair Parts and Special Tools List for identifying and ordering repair parts.

ARRANGEMENT, IDENTIFICATION AND LOCATION OF FRONT MATTER, REAR MATTER, CHAPTERS, AND WORK PACKAGES

This manual is composed of front matter, chapters containing Work Packages (WPs), and rear matter. These areas are described in greater detail in the following paragraphs.

Front Matter

The front matter includes such items as the Warning Summary, List of Effective Pages/WPs, Table of Contents, and How to Use This Manual.

Chapters and Work Packages

The WPs contain information pertinent to the performance of specific tasks. Each WP is maintained as a separate entity. The WPs are grouped into chapters based on overall content. WPs are arranged in numerical sequence regardless of chapter division. The chapter divisions and the WPs contained within the chapters are listed in the Table of Contents. The contents of each chapter are outlined briefly in the following paragraphs.

Chapter 1 - General Information, Equipment Descriptions, and Theory of Operation. This chapter provides general and descriptive information concerning the equipment. Theory of Operation appropriate to the maintenance level covered is also provided.

Chapter 2 - Operator Instructions. This chapter provides a description and location of the controls, indicators, and connectors on each piece of equipment used in the J SHELTER. It also contains a description and location of each piece of equipment and operation under usual and unusual conditions.

Chapter 3 - Crew Troubleshooting Procedures. This chapter provides operational checkout and troubleshooting procedures appropriate to the maintenance level covered.

Chapter 4 - Instructions. This chapter provides information on performing preventive maintenance actions. Included are instructions concerning service upon receipt of equipment, inspection, preventive maintenance checks and services, and repair actions.

Chapter 5 – Maintainer Troubleshooting Procedures. This chapter provides troubleshooting/fault isolation procedures appropriate to the maintenance level covered.

Chapter 6 – Parts Information. This chapter provides information on the Repair Parts and Special Tools List (RPSTL). This chapter also contains the national stock number list and part number list. The RPSTL items are used to support the maintenance actions in Chapters 6 through 8.

Chapter 7 – Destruction of Equipment to Prevent Enemy Use. This chapter provides information on how to damage the J SHELTER to prevent usage by the enemy.

Chapter 8 - Supporting Information. Included are a list of reference material, the Maintenance Allocation Chart (MAC) which identifies maintenance actions and their maintenance levels, Components of End Item (COEI) list, Basic Issue Items (BII) list, Additional Authorization List (AAL), and Expendable and Durable Items List.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Rear Matter

The rear matter includes an alphabetical index and copies of DA Form 2028 for recommending improvements to the manual.

Identifying Work Packages

Each WP is identified by a four-digit number. The first four digits are assigned sequentially. A point numbering scheme that logically fits between two existing WP numbers (e.g., .1, .2, .3) will be used to indicate WP revision level. WPs are revised due to equipment configuration differences, support equipment differences, or other similar situations. For example:

- WP 0008.1 might cover:
  - Installation of the same handle on a differently configured unit.
  - Installation of an alternate handle in place of the original handle, requiring a different procedure.
  - Installation of the handle using an alternate technique or different tools.
  - Installation of the handle using alternate fasteners.

Locating Work Packages

There are two ways to locate a WP when the number is not known, using the Table of Contents in the manual's front matter and using the Index in the manual's rear matter.

Locating a Work Package in the Table of Contents

First determine the category of the WP subject and then find the appropriate chapter in the Table of Contents. Scan the WP titles in that chapter until the WP subject matter is found. In the example below, it is desired to locate the equipment data used in this manual (shaded). Equipment data falls into the category of general information, equipment description and theory of operation. Go to the Table of Contents and find the chapter titled "General Information, Equipment Description and Theory of Operation". Scan the WP titles within that chapter until "Equipment Data and Description" is found, and follow the leader line to find the WP number.

TABLE OF CONTENTS

WP Sequence No.
Page No.

WARNING SUMMARY

HOW TO USE THIS MANUAL

Chapter 1 - General Information, Equipment Description and Theory of Operation
General Information ..... WP 0001

Figure 1. J SHELTER System Configuration 0001-1

Table 1. Nomenclature Cross-Reference List 0001-3

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Locating a Work Package in the Index

Look up the subject matter alphabetically in the Index. The index lists the applicable WP number and the page number within the WP on which the subject matter starts. In the example below, it is desired to locate the removal/replacement procedure for access panel latch (shaded). Go to the index, find "Access Panel Latch," find "Removal/Replacement" under "Access Panel Latch," and follow the leader line to find the WP and page number.

INDEX

Subject	WP Sequence No. - Page No.
A	
Access Panel Latch	
Removal/Replacement	0036-2; 0058-2
Repair Parts	0079; 0085
Actuator	
Removal/Replacement	0045-2
Repair Parts	0081

WORK PACKAGE CONTENT AND PRESENTATION

The content and the presentation techniques used in the WPs vary according to the material covered.

Common Features

In all cases, the WP title is placed at the top of the page immediately below the manual and WP number and is set off by horizontal lines as shown below.

TMSS LRG 0002

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION
TMSS LRG
EQUIPMENT DESCRIPTION AND DATA

On the second and subsequent pages of the WP, the manual and WP number are repeated.

The page number is placed at the bottom of the page and consists of the WP number and a sequential number denoting the page within the WP as shown below.

0002-1

Paragraphs are not numbered.

Primary paragraphs are denoted by headings set in **BOLD UPPER CASE (CAPITAL)** type.

Secondary and lower-level paragraphs are denoted by headings set in Bold Upper and Lower Case type. These paragraphs always relate to and are subordinate to the most recent primary paragraph heading.

Figures and tables (excluding the RPSTL) are numbered sequentially within each WP starting with numeral 1.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Descriptive Narrative

For WPs consisting primarily of descriptive narrative (equipment data, theory of operation, etc.) text begins immediately below the WP title.

Procedures

The example below is for WPs consisting primarily of procedures such as maintenance tasks, operating instructions, etc. The initial setup section provides information on tools, material/parts, personnel required, and equipment condition. Procedural steps are numbered.

TMSS LRG **0059**

CONDENSER GRILL(S) REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
General mechanic's tool kit (WP 0102, Item 1)

References
WP 0005

Materials/Parts
Condenser grill(s)
Sealing compound (WP 0105, Item 39)

Equipment Condition
ECU shut down

Personnel Required
One

REMOVAL

1. Verify that ECU (Figure 3, Item 8) has been shut down in accordance with ECU Shut Down Procedure (WP 0005) of this TM.
2. Remove access panel (Figure 3, Item 9).
3. Remove and retain ten screws (Figure 3, Item 1), lock washers (Figure 3, Item 2), and flat washers (Figure 3, Item 3) that secure condenser grill(s) (Figure 3, Items 5, 7 and 11), ten clamps (Figure 3, Item 4) and ten spacers (Figure 3, Item 6) to ECU (Figure 3, Item 8).
4. Remove and retain condenser grill(s) (Figure 3, Items 5, 7 and 11), ten clamps (Figure 3, Item 4) and ten spacers (Figure 3, Item 6) and set aside.

In most cases, figures relating to the procedural step are also provided. When the figure is indexed (as in maintenance procedures), procedural steps include the figure number and item number inside parentheses.

Supporting Information

The Supporting Information WPs contain instructions detailing the content and presentation techniques used in the WP.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION
J SHELTER
GENERAL INFORMATION

SCOPE

This Operator and Field Maintenance Manual Including Repair Parts and Special Tools List (RPSTL) provides instructions and procedures for setup, operation, teardown and maintenance. Typical configuration for J SHELTER is shown in Figure 1.

J SHELTER

The J SHELTER is a soft-walled shelter that can be deployed in the field by a minimum of eight people. The shelter does not require any special equipment for assembly in the field

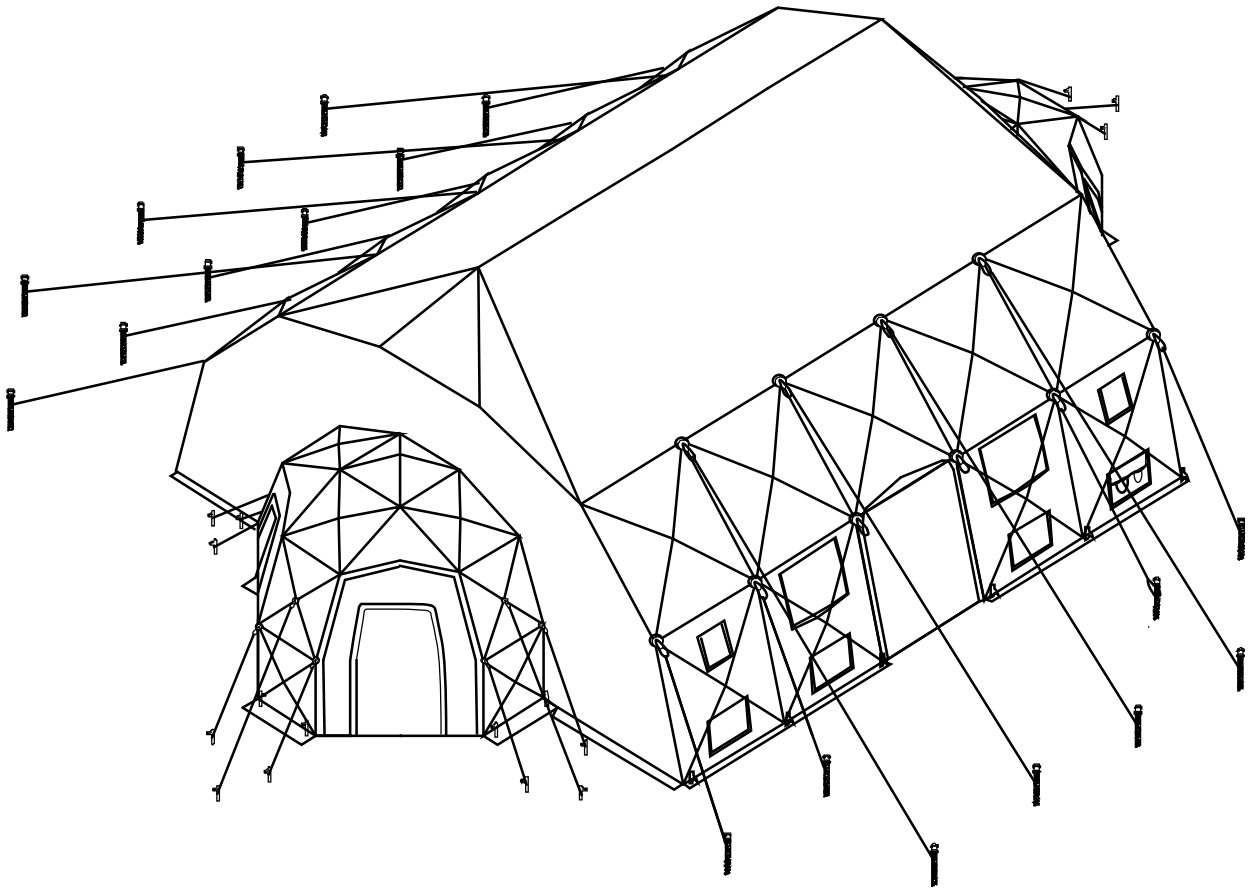


Figure 1. J SHELTER System Configuration.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA PAM 750-8, The Army Maintenance Management System (TAMMS) User Manual, DA PAM 738-751, Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If the J SHELTER needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance.

Put it on an SF 368, Product Quality Deficiency Report. Mail it to: Commander, U.S. Army Communications-Electronics Life Cycle Management Command (C-E LCMC) and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-SS, Fort Monmouth, New Jersey 07703-5006. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with the J SHELTER be reported so that the problem can be corrected and improvements can be made to prevent the problem in future J SHELTER items.

Corrosion specifically occurs with metals. It is an electro mechanical process that causes the degradation of metals. It is commonly caused by exposure to moisture, acids, bases, or salts. An example is the rusting of iron. Corrosion damage in metals can be seen, depending upon the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking.

Plastics, composites, and rubbers can also degrade. Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically UV) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling and/or breaking.

SF 368 (Product Quality Deficiency Report) should be submitted to: Commander, U.S. Army Communications-Electronics Life Cycle Management Command (C-E LCMC) and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-SS, Fort Monmouth, New Jersey 07703-5006.

OZONE DEPLETING SUBSTANCES (ODS)

In accordance with Executive Order 12856, other public laws, DOD policy and Army policy, the use of ODS has been outlawed for all new acquisitions. Operation and maintenance of the J SHELTER does not require the use of ODS.

DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

Procedures to destroy this equipment to prevent enemy use are found in Chapter 7 WP 0024 and WP 0025 of this TM and in accordance with TM 750-244-2, Procedures for Destruction of Electronic Material to Prevent Enemy Use.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PREPARATION FOR STORAGE OR SHIPMENT

Place items in administrative storage for short periods of time when a shortage of maintenance resources exists. It should be possible to place items in a state of mission readiness either within 24 hours or within the time frame that the directing authority may determine. Keep appropriate maintenance records during storage.

Prior to placing the equipment in administrative storage, Army activities perform Preventive Maintenance Checks and Services (PMCS), complete Equipment Serviceability Criteria (ESC) evaluations, correct shortcomings and deficiencies, and complete all Modification Work Orders (MWO). When removing items from administrative storage, the operator performs PMCS to ensure operational readiness.

Inside storage is preferred for items selected for administrative storage. If inside storage is not available, use trucks, vans, or other containers.

WARRANTY INFORMATION

J SHELTER system is warranted for one year. Contact the Regional Support Center (RSC) representative for further information on warranted items. Report all defects to supervisor, who will take appropriate action.

NOMENCLATURE CROSS-REFERENCE LIST

Common names and/or abbreviations are used in this manual to make a procedure easier to read. Table 1 matches the official nomenclatures with the common names.

Table 1. Nomenclature Cross-Reference List.

OFFICIAL NOMENCLATURE	COMMON NAME
Power Plant, Utility	J SHELTER
Shelter Repair Kit	Field Repair Kit
Stake	Rebar/Red Stake
Tent, Modular, General Purpose System	Shelter

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

LIST OF ABBREVIATIONS/ACRONYMS

Table 2 is an alphabetical list of abbreviations/acronyms used throughout this manual.

Table 2. Abbreviations/Acronyms.

ABBREVIATION/ACRONYM	NAME
BII	Basic Issue Items
CAGEC	Commercial and Government Entity Code
CCS	Command Center System
CG	Center of Gravity
CHT	Contactor, Heater
CMSP	Condenser Motor Starter Protector
COEI	Components of End Item
CP	Command Post
CPC	Corrosion Prevention and Control
CPCS	Command Post Communication System
CPP	Command Post Platform
D	Depot
DED	Detailed Equipment Decontamination
DMR	Depot Mobilization Requirements
DS	Direct Support
ECU	Environmental Control Unit
EIR	Equipment Improvement Recommendations
ESC	Equipment Serviceability Criteria
FGC	Functional Group Code
FM	Field Manual
FO	
GB	Ground Bar
GS	General Support
HCP	Hardness Critical Procedures
HDBK	Handbook
I/O	Input/Output
LED	Light Emitting Diode
LHT	Low Heat Temperature
LPC	Low Pressure Cut-out
MAC	Maintenance Allocation Chart
MC	Motor, Condenser Fan
ME	Motor, Evaporator Fan
MOPP	Mission Oriented Protective Posture
MOS	Military Occupational Specialties
MSS	Mode Select Switch
MWO	Modification Work Order
NBC	Nuclear, Biological, and Chemical
NSN	National Stock Number
ODS	Ozone Depleting Substances
OPL	Out-of-Phase Light
P/N	Part Number
PDB	Power Distribution Block
PDU	Power Distribution Unit
PMCS	Preventive Maintenance Checks and Services

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

LIST OF ABBREVIATIONS/ACRONYMS - CONTINUED

ABBREVIATION/ACRONYM	NAME
POL	Power On Light
PPE	Personal Protection Equipment
PQDR	Product Quality Deficiency Report
PSI	Pounds per Square Inch
PSR	Phase Sending Relay
QA	Quality Assurance
QV	Quench Valve
RCE	Radiologically Contaminated Equipment
RCO	Radiation Control Officer
RPO	Radiation Protection Officer
RPSO	Radiation Protection Staff Officer
RPSTL	Repair Parts and Special Tools List
RSC	Regional Support Center
RSO	Radiation Safety Officer
S1	Switch, Low Pressure
S2	Switch, High Pressure
S3	Switch, High Temp Stage Close
S4	Switch, Low Temp Stage Close
SCCP	Compressor Motor Starter Protector
SDR	Supply Discrepancy Report
SDS	Sorbent Decontamination System
SF	Supply Fan
SG	Sight Glass
SICPS	Standard Integrated Command Post System
SMR	Source, Maintenance and Recoverability
SOP	Standing Operating Procedure
SP	Service Port (external)
SV1	Solenoid Valve (Liquid)
TAMMS	Army Maintenance Management System
TB	Troubleshooting
TB	Terminal Block
TD	Time Delay, Compressor
TDR	Transportation Discrepancy Report
TMDE	Test, Measurement, and Diagnostic Equipment
TMSS	Trailer Mounted Support System
J SHELTER	Trailer Mounted Support System - Large
TQG	Tactically Quiet Generator
TX1	Control Transformer
TXV/D	Thermal Expansion Valve & Distribution
U/I	Unit of Issue
UPS	Uninterruptible Power Supply
USM	User Security Manual
VAC	Voltage, Alternating Current
VI	Vibration Isolator
WD50	Auxiliary Heater
WP	Work Package

QUALITY OF MATERIAL

Material used for replacement, repair, or modification must meet the requirements of this manual. If qualities of material requirements are not stated in this manual, the material must meet the requirements of the drawings, standards, specifications, or approved engineering change proposals applicable to the subject equipment.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SAFETY, CARE, AND HANDLING

To prevent personal injury and damage to equipment, obey the following general rules and precautions

1. Become familiar with the warnings and cautions listed in the front of this manual.

   a. Warnings – Present circumstances or procedures that, if not strictly adhered to, may cause serious injury or death.

   b. Cautions – Present circumstances that can cause damage to equipment or loss of the mission.

2. Recognize that improperly lifting or carrying heavy equipment can result in serious injury. Follow number of lifter guidelines/requirements in safety marking (labels or stencils) and caution statements in technical documentation

3. Ensure all power is turned off before starting any removal task. Power should be removed before connecting or disconnecting cables due to shorting hazards.

4. Do not touch connector terminals with any tool, bare hands, or dirty cloth. Tools may damage the connector. Dirt or sweat may cause corrosion.

5. Before touching any electrical components, discharge static electricity by touching a metal chassis or cabinet before handling component. A static discharge to an electrical component can destroy internal circuits.

6. Know where emergency equipment is located. Read instructions on the fire extinguisher label.

7. Ensure hands and shoes are clean before working on equipment.

NUCLEAR HARDNESS

There are no Hardness Critical Procedures (HCP) in this manual.

SUPPORT INFORMATION FOR REPAIR PARTS, SPECIAL TOOLS, TMDE AND SUPPORT EQUIPMENT

Repair parts are listed and illustrated in parts information work packages WP 0017 through WP 0021 of Chapter 6 in this TM. Maintenance Allocation Chart (MAC) is in WP 0028.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION
J SHELTER
EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

Characteristics, Capabilities and Features

The J SHELTER is designed for mobility and may be transportable by vehicle, air, rail, or sea and can be loaded by crane.

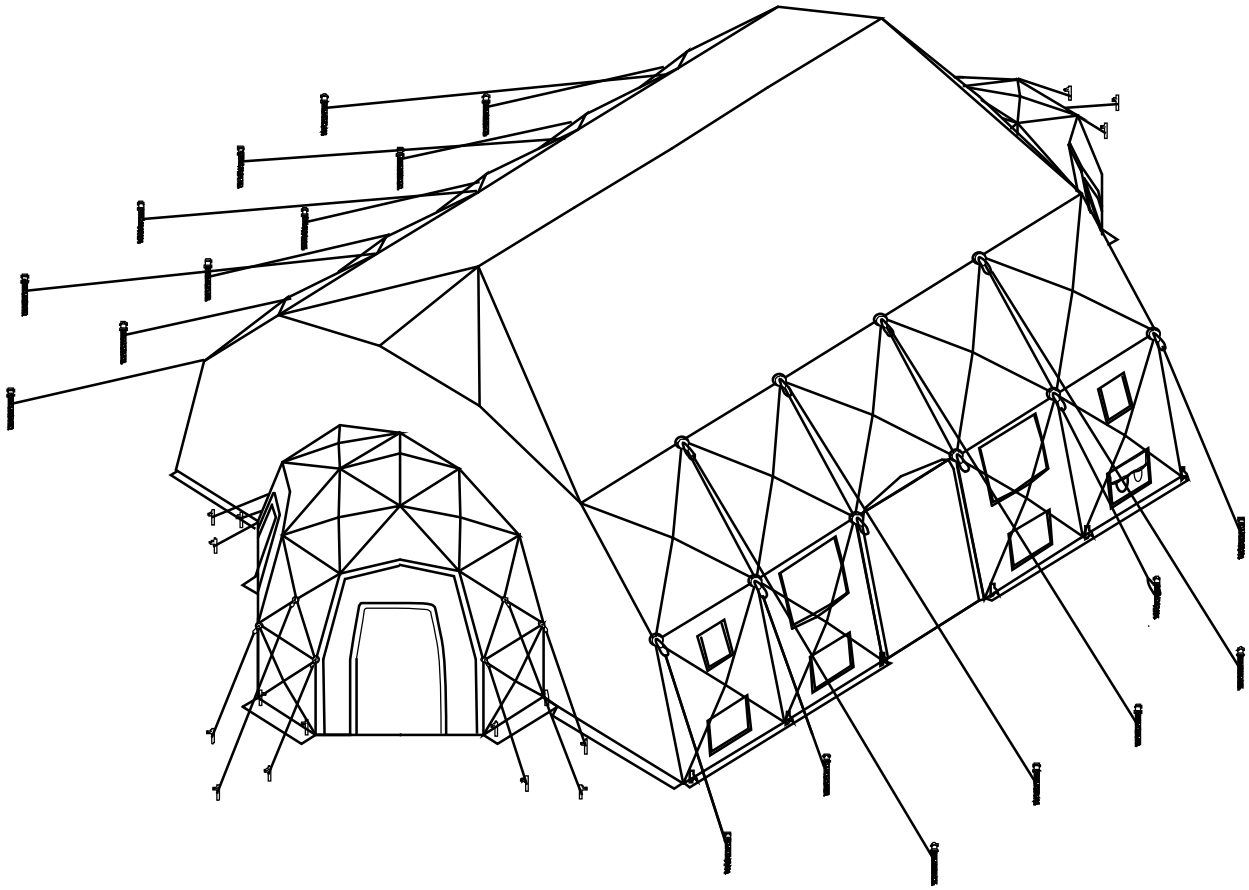


Figure 1. J SHELTER.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

J SHELTER

The J SHELTER (Figure 2) is composed of a frame with two pre-attached covers and end-caps. The frame consists of an arrangement of various sized struts connected as pairs and articulated at the hubs. The hubs enable the struts to move freely and allow for quick erect and strike. There are two interior metal frames which provide load support for the shelter. The shelter is erected by the use of a large rubber bladder which inflates with the use of a blower. When the bladder is fully blown up, the shelter is erect. Air is then release by three zippers on the bladder. The interior and exterior cover fabric is fire retardant, mildew resistant, and water repellent. The covers are also abrasion and UV resistant. The exterior fabric enhances blackout in the visual and near infrared spectrum. Covers are pre-attached to the frame at the hubs (via keepers) so there is approximately one foot of dead air space between the covers that acts as natural insulation. The covers are removable in the event of damage or change of mission. J SHELTER features screen windows, conditioned air supply and return duct ports, wind lines, and ground staking eyes. The fabric floor provides a clean smooth surface inside the shelter. It also provides a degree of wind blockage coming from under the shelter and helps prevent destruction caused by vermin and insects.

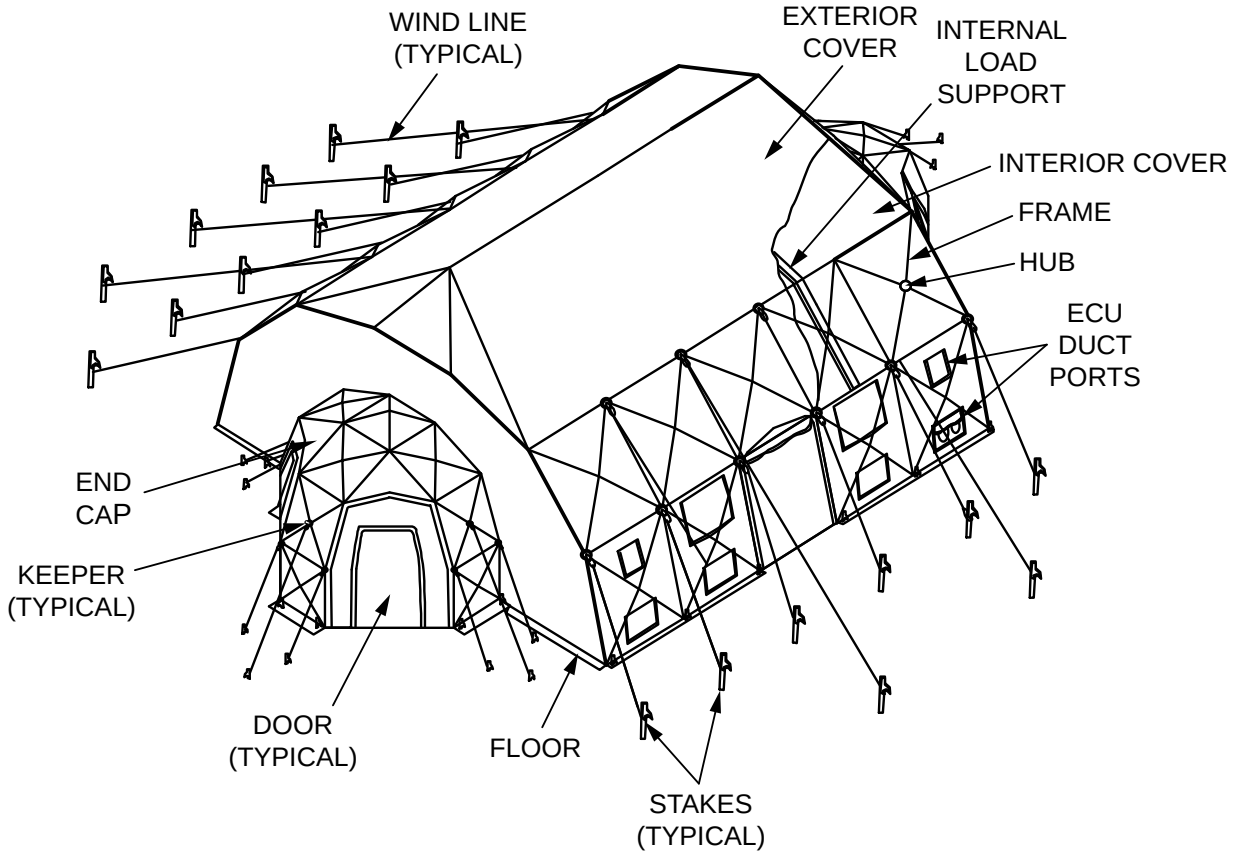


Figure 2. J SHELTER MAJOR COMPONENTS.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SHELTER INTERCONNECTIONS

NOTE

This equipment is optional. Your unit may or may not have this equipment.

J SHELTER Connector Set (End-to-End)

The End to End connector set (Figure 3) consists of one exterior cover and one interior cover designed to attach to a standard end cap door and side door. The doors are used on the J SHELTER end caps. The connector set can also be used to connect an door with a legacy SICPS tent. The connector contains a set of connections that allow one side of the connector to be attached to a legacy style SICPS tent. The J SHELTER Connector Set (End-to-End) has an additional set of connections to allow attachment to the legacy SICPS. When using this connection to attach from door to door the additional connections should be left rolled and attached to the side of the connector with attached hook-and-loop strips.

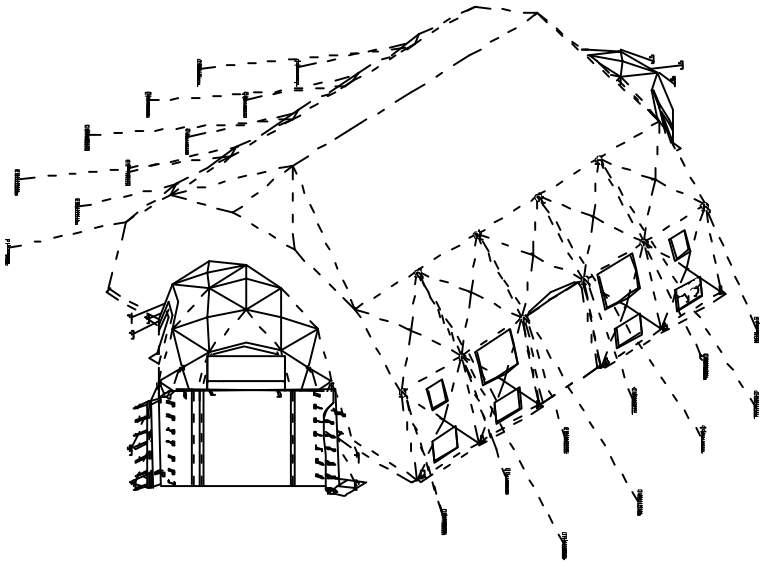


Figure 3. J SHELTER Connector Set (End-to-End).

Boot Connector

The boot connector (Figure 4) is used to attach a shelter creating a T shaped assembly between the two adjacent shelters. It provides a smooth weather resistant passage between two shelters.

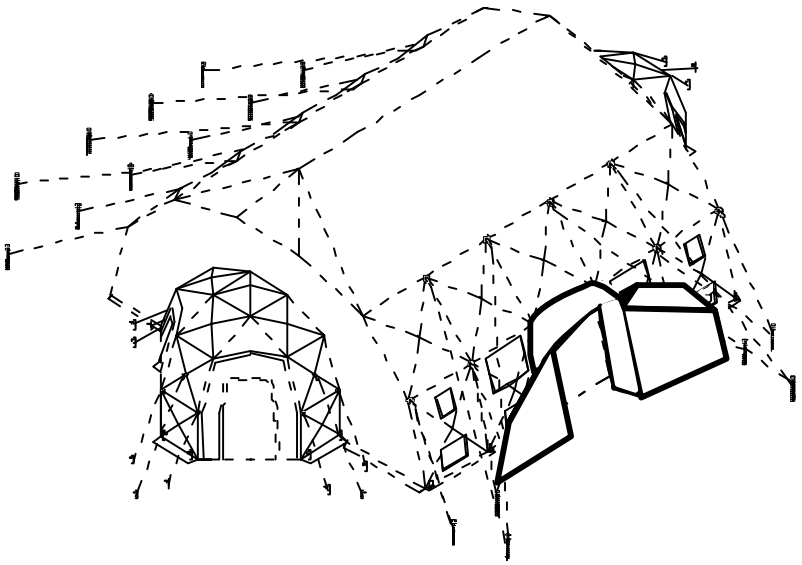


Figure 4. J SHELTER Boot Connector.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

EQUIPMENT DATA

J SHELTER

NOTE

Height listed below is for external dimension.

Specifications:

Dimensions (with-out end-caps)	404 in L x 410 in W x 216 in H (w/o riser) (10.26 m L x 10.41 m W x 5.48 m H)
Dimensions (with-end-caps)	635 in L x 410 in W x 216 in H (16.12 m L x 10.41 m W x 5.48 m H)
Doors/Boots	2 side doors (one per shelter side) 4 doors (two per end cap) for booting vehicle to shelter.
Insulation Factor	R-2.1
Foot print	1250 square feet (116 square meters)
Total Weight	1600 lbs (725.7 kg)

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION
J SHELTER
THEORY OF OPERATION

J SHELTER

The J SHELTER is a soft-walled shelter that can be deployed by a minimum of eight people. The shelter does not require any special assembly in field and all equipment needed for setup or teardown is provided with the shelter.

The J SHELTER is composed of a frame with two pre-attached covers. Frame consists of an arrangement of various sized struts connected as pairs and articulated at hubs. These hubs enable struts to move freely and allows for setup or teardown.

Both the interior and exterior cover fabrics are fire retardant, mildew resistant, and water repellent. They have abrasion resistance and are UV resistant. Exterior fabric enhances blackout in visual and near infrared spectrum.

Both covers are pre-attached to frame at hubs in such a way that there is approximately one foot of dead air space between two covers that acts as natural insulation. These covers are easily removable in the event of damage or change of mission. All shelters feature screen windows, conditioned air supply and return duct ports, wind lines, and integral ground staking plates.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CHAPTER 2

OPERATOR INSTRUCTIONS FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

OPERATOR INSTRUCTIONS
J SHELTER
OPERATION UNDER USUAL CONDITIONS – SITE PREPERATION

INITIAL SETUP:

Tools and Special Tools	**Personnel Required**
Field repair kit	Two

GENERAL

The following WP covers site selection and preparation procedures of J SHELTER.

SITE REQUIREMENTS

The J SHELTER is comprised of one main shelter section (Figure 1, Item 1) and two end cap sections (Figure 1, Item 2). To ensure minimal problems and good operation of J SHELTER, ensure area is:

- Dry
- Level with minimum clearing of 50 feet (15.2 m) wide by 50 feet (15.2 m) long for deployment and operation of shelter, (Figure 1).
- Free of hazards (e.g., trees, buildings, or other structures), that would cause physical interference with system and any associated equipment

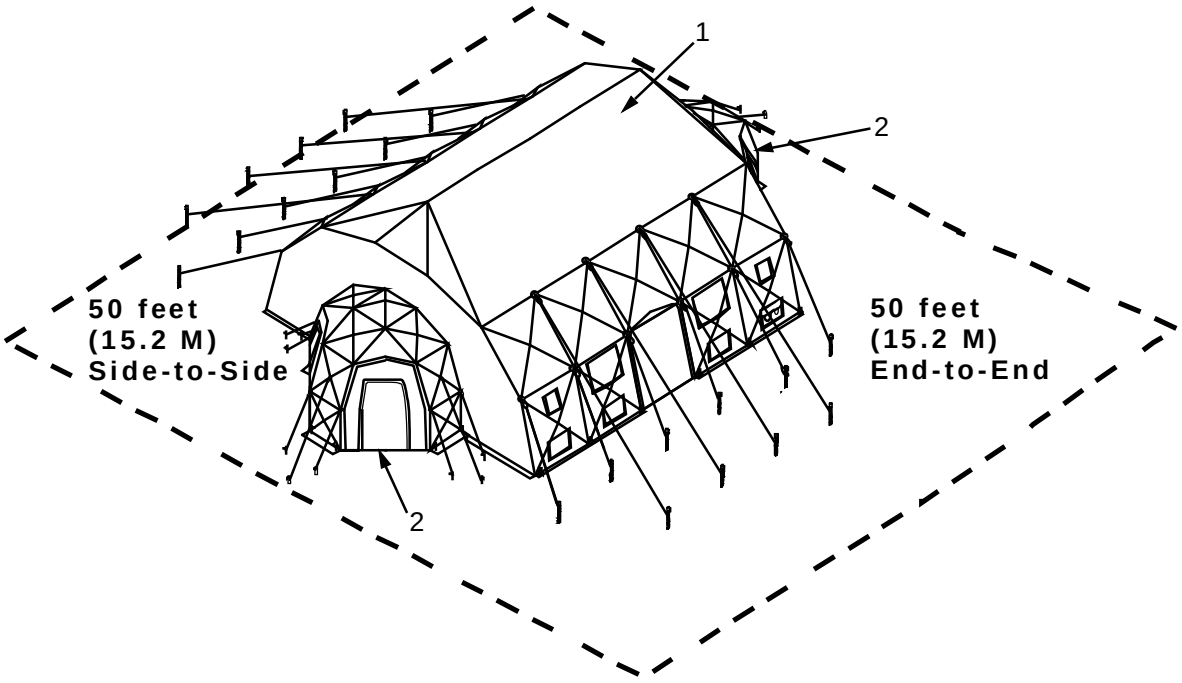


Figure 1. J SHELTER System Deployment Footprint.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

ASSEMBLY AND PREPARATION FOR USE

Perform all setup and PMCS procedures
END OF TASK

PREPARING SHELTER SITE

Verify there is enough space to erect shelter. Footprint of shelter requires a clear space measuring 50 feet (15.2 m) from end of one end cap to end of other end cap and 50 feet (15.2 m) from side-to-side. This space must be free from all obstructions and should generally be level all around. Figure 2 shows a diagram of area required to site shelter and associated equipment.

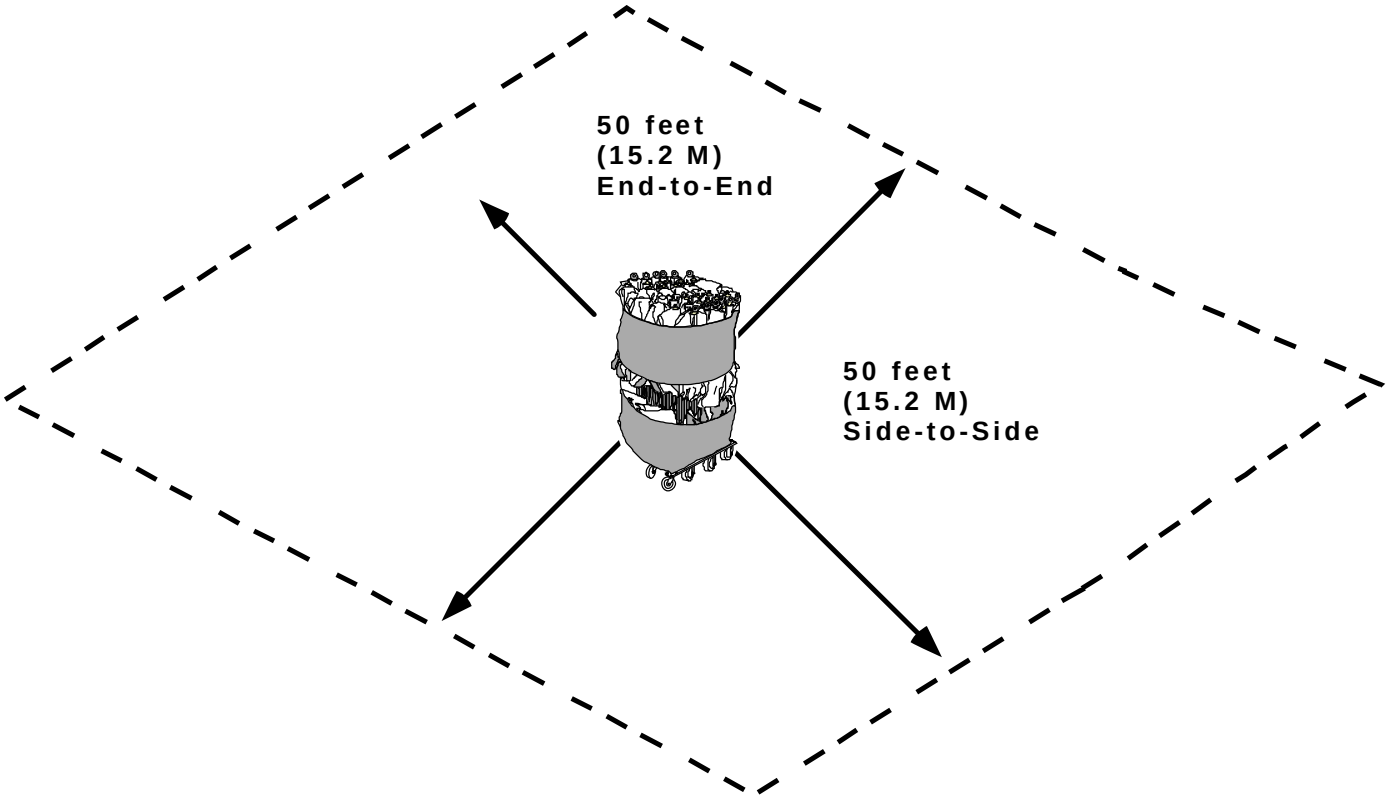


Figure 2. Shelter Pre-Deployment Footprint.

END OF TASK

END OF WORK PACKAGE

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

OPERATOR INSTRUCTIONS
J SHELTER
OPERATION UNDER USUAL CONDITIONS

INITIAL SETUP:

Tools and Special Tools
Field repair kit

Personnel Required
Eight

GENERAL

The following WP covers setup procedures of J SHELTER. It also covers, disassembly, and storing of system.

SHELTER SETUP

WARNING

Bladder and floor are a two-person lift. Serious personal injury may result. Handle bladder carefully to ensure no damage is done to it; otherwise, the bladder may leak.

1. Remove bladder (Figure 1, Item 1)
2. Remove floor . Place out of immediate work area, and re-cinch tie downs.
3. Using handles sewn into bladder wrap, move bladder to center of intended position.
4. Remove wrap from bladder and stow on rear cargo area.
5. Unroll bladder (Figure 1, Item 1) and locate four handles (Figure 1, Item 2).
6. Use four crew (one per corner), grasp handles and place bladder in center of desired shelter location. Position bladder neck edge (Figure 1, Item 3) perpendicular to the back edge of the setup area. verify all 3 zippers (Figure 1, Item 3) on bladder are closed.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Off-Loading Shelter – Continued

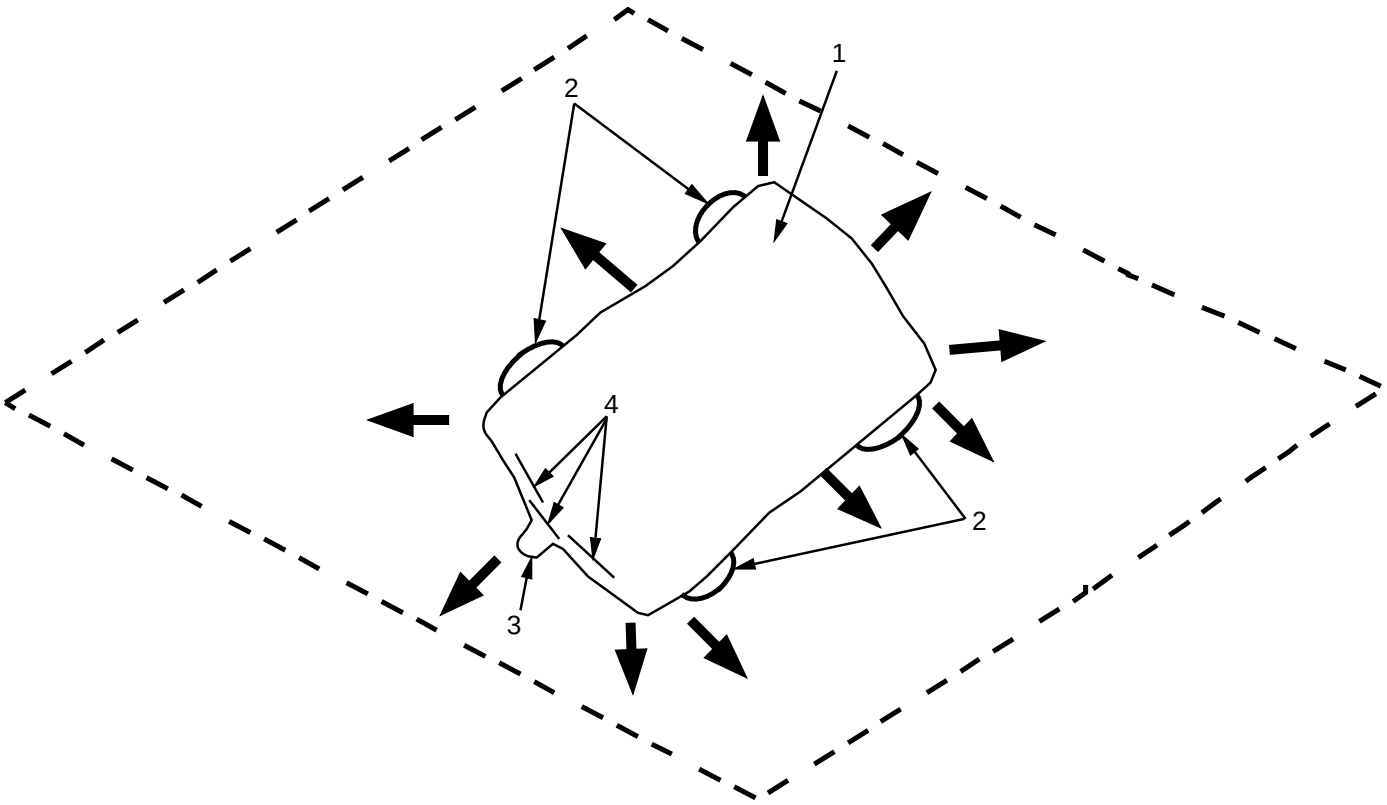


Figure 1. Position Bladder.

Off-Loading Shelter – Continued

WARNING

Beware of tension and possible weight shifting when removing tie downs. Shelter may shift forward and cause personal injury and damage to equipment.

1. Unbuckle bottom tie down first and place out of immediate work area.
2. Have crew steady shelter as top tie down is unbuckled.

NOTE

Allow room for shelter to expand outwards when straps are loosened.

3. Remove two wraps from around shelter and place out of immediate work area.

WARNING

All crew are required to push/pull from lower half of shelter only to prevent the shelter from toppling over. Damage to the equipment and personal injury may result if the shelter falls over.

Ensure bladder fabric does not become caught in wheel assemblies when rolling shelter onto bladder. Damage to the equipment may result.

4. Roll shelter (Figure 2, Item 2) onto bladder (Figure 2, Item 1) and center on bladder.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

5. Orient shelter (Figure 2, Item 2) so staking brackets (Figure 5, Item 3) on both sides of shelter are facing lengthwise in relationship to bladder.

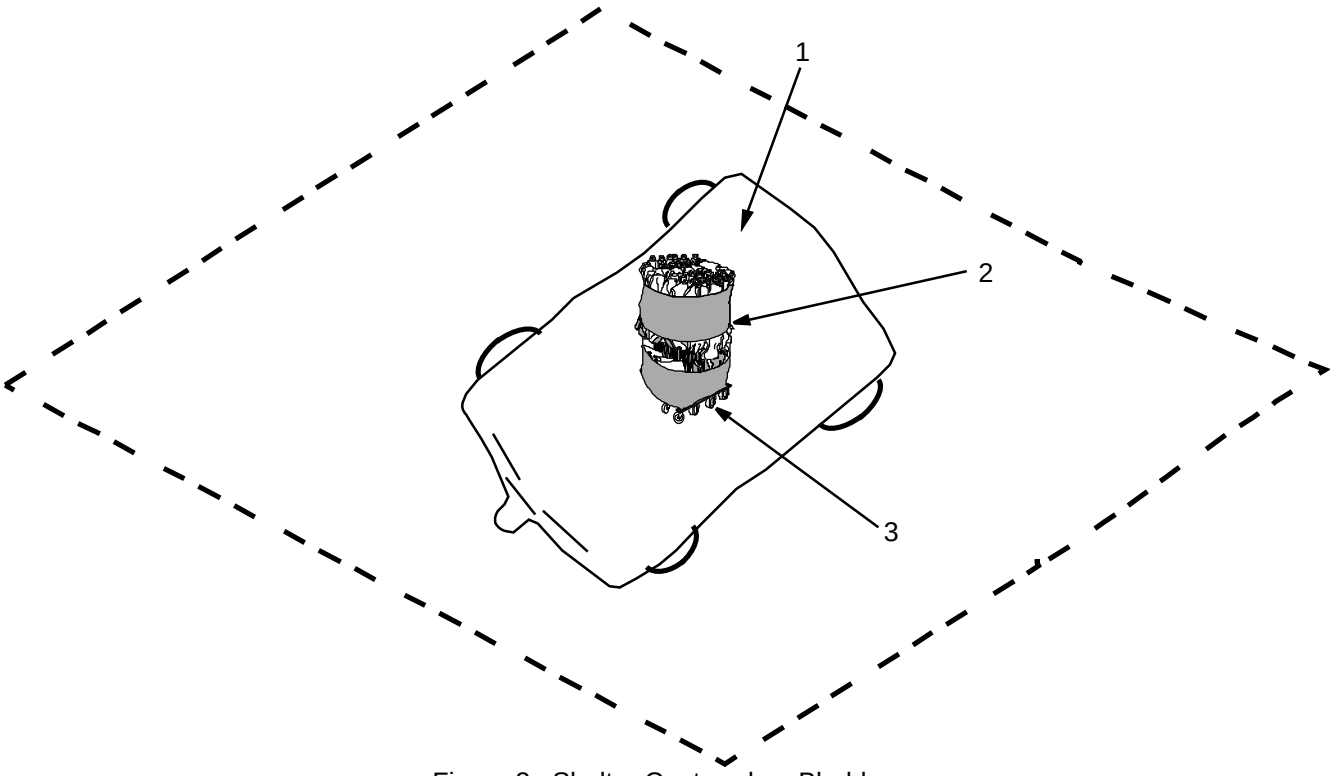


Figure 2. Shelter Centered on Bladder.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Expand Shelter

WARNING

This procedure requires six deployment crew and one team leader (spotter) to expand shelter. Excessive strain on personnel could lead to bodily injury.

1. Position personnel, one at each corner and one in center of each end of shelter.
2. Have each personnel grasp a strut with both hands and walk in unison slowly outwards, spreading shelter evenly over bladder.

NOTE

Shelter must be at maximum spread to be erected properly. At maximum spread, shelter will resist any further expansion.

3. Continue spreading shelter until maximum spread is reached.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Expand Shelter - Continued

WARNING

This procedure exposes crew members to trip hazards. Use caution to prevent injury.

4. Position team leader over bladder neck to visually align center of shelter over center of bladder. When shelter is properly centered, about 2 feet of bladder will stick out from both ends under shelter.

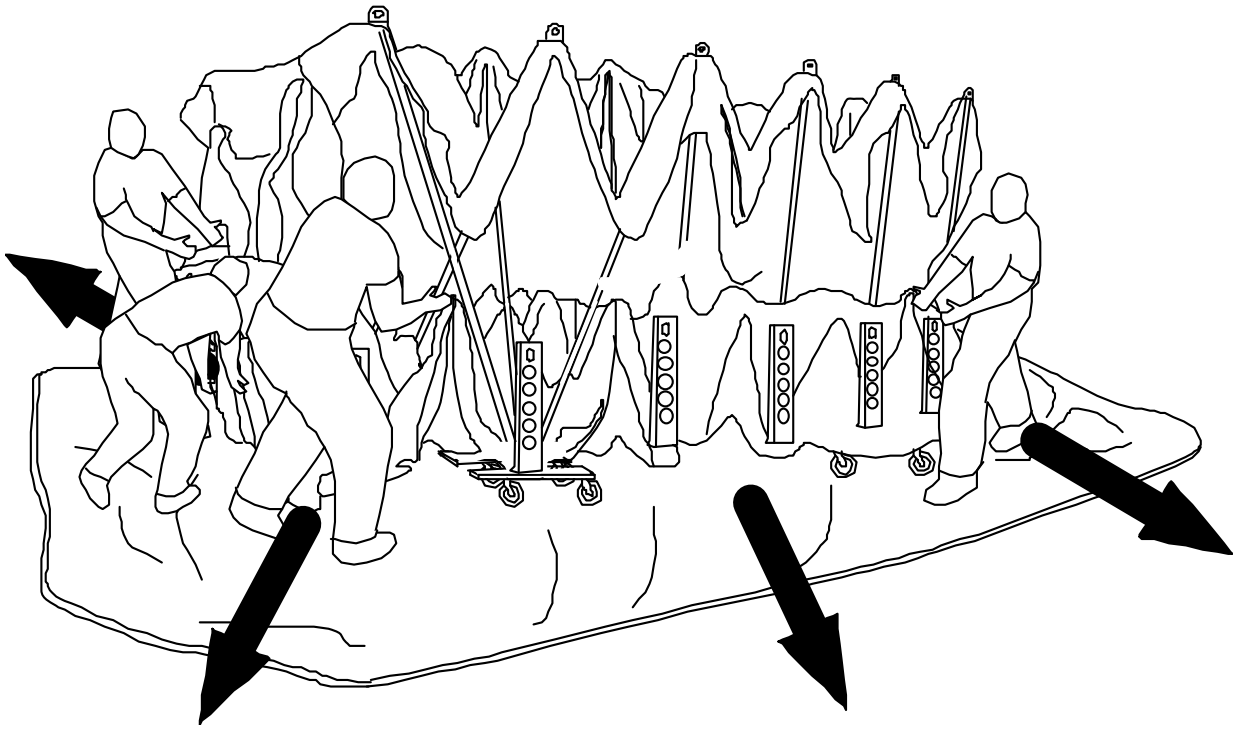


Figure 3. Spread the Shelter.

END OF TASK

Raise Shelter

CAUTION

Damage to the equipment will result if T Plates are not properly positioned.

1. Ensure T Plates are hanging outside of shelter after expanding shelter.

2. Place T Plate (Figure 4, Item 5) from on top of both sides of shelter to hang loose outside of shelter.

WARNING

Attaching high windlines requires one crew member to walk across spread out shelter making wind line connections. The crew member should only step in valleys where strut pair supports are under foot. Failure to heed this warning could result in damage to shelter and personal injury.

3. Remove transport bag containing wind lines from designated area.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Raise Shelter - Continued

4. Remove eight green wind lines and walk in shelter frame valleys to second row of wind line eyebolts and attach carabineer end to eye bolts (Figure 4, Item 1) affixed to side of shelter.

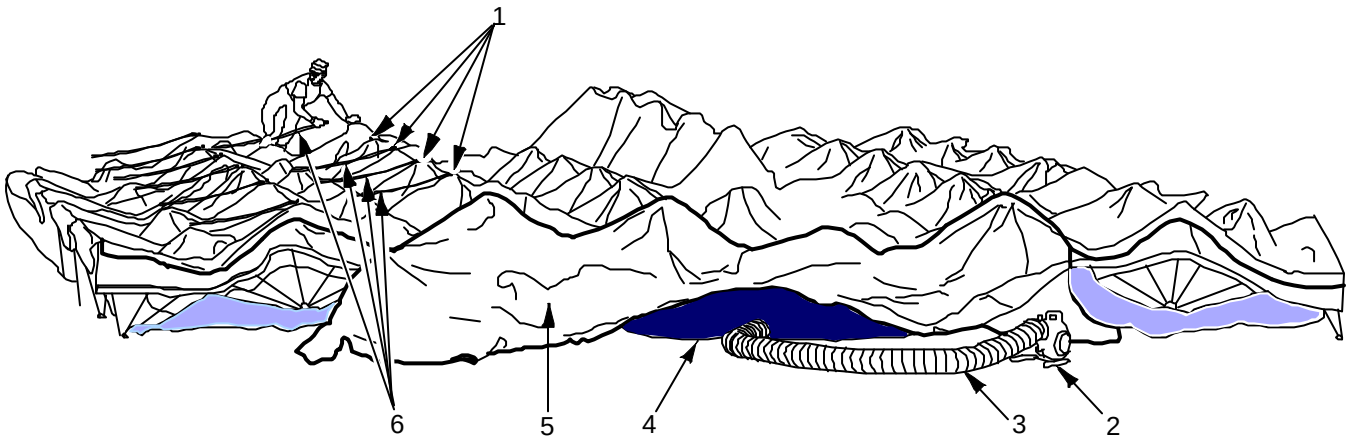


Figure 4. Attach High Wind Lines and Blower/Duct.

5. Remove twelve rebar stakes and two sledge hammers from Transport Bag.
6. Distribute 1 rebar stake near each staking bracket and one sledge hammer on each side of shelter.
7. Remove blower, 39 foot extension cord, and duct from Transport Bag.
8. Secure one end of duct (Figure 4, Item 3) to blower (Figure 4, Item 2) with tie down.
9. Insert other end of duct (Figure 4, Item 3) about three feet into neck of bladder (Figure 4, Item 4) and secure duct with tie down.
10. Verify three bladder zippers are closed.
11. Verify blower switch is in OFF position.
12. Attach extension cord between blower (Figure 4, Item 2) and power source.

.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Raise Shelter - Continued

WARNING

When raising shelter, do not allow personnel inside shelter until shelter is completely staked in place. If bladder fails or duct comes off, shelter will fall to ground and can cause death or serious injury to personnel.

If setting up during high winds, position one person on each side to secure wind lines while shelter is being raised. Drive one stake into ground approximately 2 feet from shelter and secure wind line to stake if winds are excessive.

Use caution when standing near perimeter of shelter, walls will move as shelter rises. Do not place arms and hands between shelter struts. Serious personal injury may result.

13. Position one crew member with blower. Position remaining crew along sides of shelter while bladder is inflating.

NOTE

Bladder requires 15 to 20 minutes to fully inflate. When bladder is fully inflated, shelter will be slightly off ground, totally supported by bladder.

If shelter is not in desired location, minimal positioning adjustments can be made while shelter is supported by bladder. Under direction of team leader to push shelter to desired location.

14. Turn blower switch on and allow bladder to fully inflate.

15. Visually inspect and verify that stake plates are properly aligned by shifting bottom bracket (Figure 5, Item 2) underneath top bracket (Figure 5, Item 3) as shown in Figure 5.

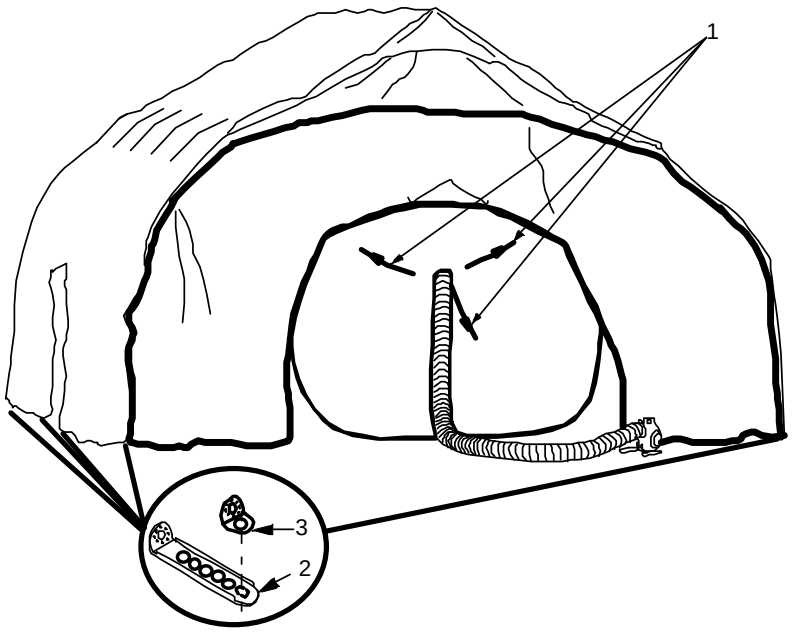


Figure 5. Open Bladder Zippers.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Raise Shelter - Continued

NOTE

Inspect struts for vertical alignment. This will ensure proper inflation and wall alignment.

16. Once shelter is in final position, open three zippers (Figure 5, Item 1) on bladder approximately 6 inches (15.24 cm).

17. Allow bladder to deflate slightly until exterior and interior hubs and staking brackets are flush with ground.

WARNING

DO NOT allow bladder to deflate further until all stakes are secure. If necessary, close zippers re-inflate bladder slightly. Repeat as necessary.

18. Remove 12 rebar stakes from transport bag. Using sledge hammer, drive 12 rebar stakes, through staking plates along sides of shelter, into ground in accordance with numbered pattern shown in Figure 6. Ensure 12 rebar stakes angle away from shelter.

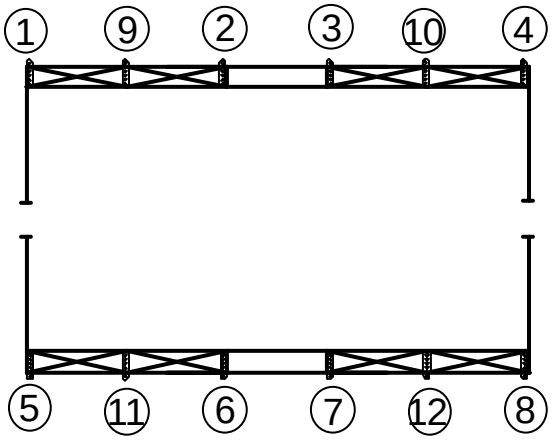


Figure 6. Staking Plate Position.

WARNING

Shelter must be fully staked down before turning off blower. Personal injury and damage to shelter could result.

19. Turn blower OFF.

20. Open all three zippers and deflate bladder.

21. While bladder is deflating, remove blower duct from neck of bladder by unfastening tie down.

22. Remove blower duct from blower by unfastening tie down.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Raise Shelter - Continued

23. Return blower to designated area and secure.

24. Pack duct in transport bag and return to designated area.

25. Remove twelve black wind lines from transport bag and attach carabineer end to eye bolts affixed to long side of shelter at 7 feet (2.13 m) level.

26. Remove eight remaining rebar stakes from transport bag and distribute around shelter approximately 5 to 7 feet (1.52 to 2.13 m) away from eye bolt location as shown in Figure 7. Using sledge hammer, drive 12 rebar stakes into ground. Ensure all rebar stakes (20 total) angle away from shelter.

27. Hook wind lines onto stakes and adjust tension until wind lines are taut.

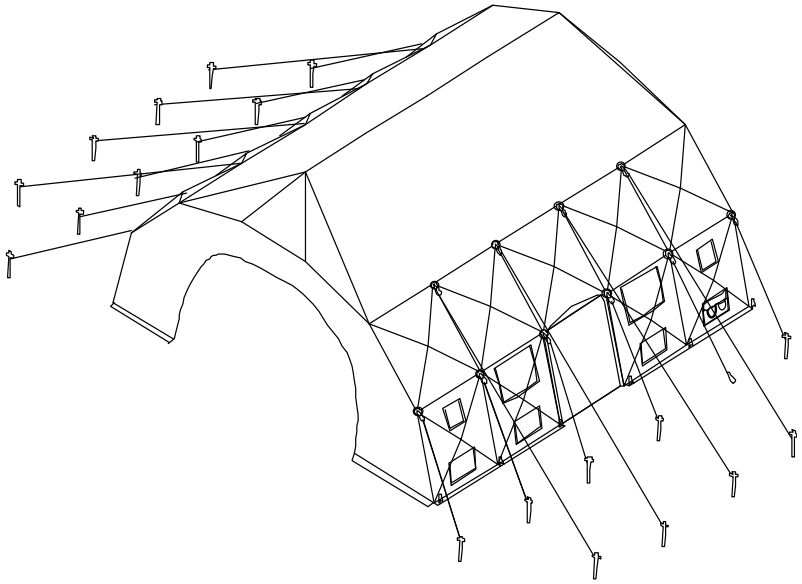


Figure 7. Place Stakes and Secure Wind Lines.

28. Walk carefully forward on bladder towards filler neck to force residual air from bladder.

NOTE

It is important to keep bladder neck free and clear so that air may continue to escape as bladder is folded. Any folds or wrinkles should be pulled out by grabbing both ends of bladder and pulling material as needed to straighten.

29. Start at one side and fold bladder in thirds lengthwise (Figure 8).

30. Fold bladder into half.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Raise Shelter - Continued

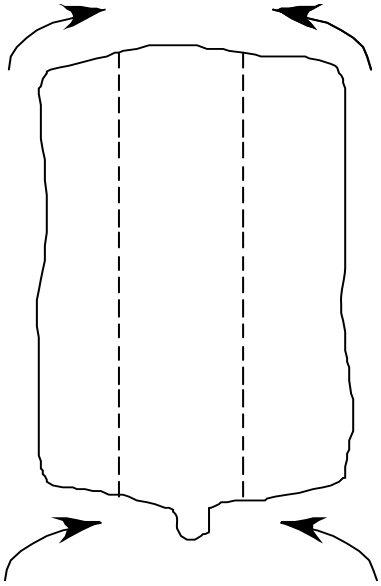


Figure 8. Fold Bladder in Thirds.

NOTE

Keep bladder straight while rolling.

30. Starting at end of bladder farthest from filler neck, roll up bladder towards neck.

31. Spread out wrap with buckles facing down.

CAUTION

The following procedure is a two person lift.

32. Place rolled-up bladder onto wrap. Place wrap around bladder and fasten/secure buckles.

33. Return rolled up bladder to designated area.

END OF TASK

Install Shelter End Caps and Side Doors

NOTE

The shelter has two end caps that attach to the main shelter with same procedure.

1. Attach remaining ends of both exterior T plates (Figure 9, Item 1) on both ends of shelter by connecting respective hook-and-loop strips, starting midway up shelter (Figure 9 Item 2) and working down towards bottom of opening.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Shelter End Caps and Side Doors - Continued

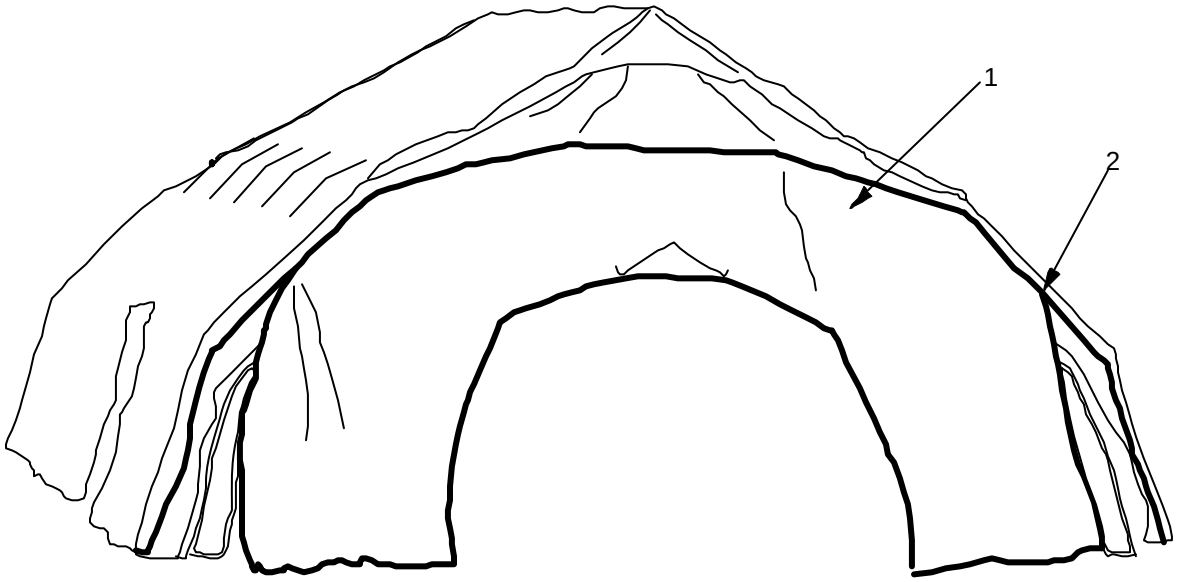


Figure 9. Finish Shelter T Plate Connections.

2. Remove two transport bags with end caps from designated area and place one each at open ends of main shelter.

3. Remove ladder from designated area and set aside.

4. Remove two transport bags with stake sets (one stake set per end cap) from designated area and place one transport bag at each end cap location.

5. Open one end cap transport bag and remove four push poles and end cap.

NOTE

Return all straps to transport bag immediately upon removal. These straps are required to compress end caps enough to fit in transport bag for redeployment.

6. Remove straps, ground cover, and floor wrapped around end cap.

7. Place floor to side of immediate work area.

8. Place ground cover on ground, stencil side up, and align long end to opening in T plate.

9. Secure ground cover in place by driving red stakes through six stake eyes in ground cover until stake heads are flush with ground.

CAUTION

Expanding and attaching end caps requires four crew members. When expanding end cap, all movements must be coordinated. If at any time resistance is felt, stop immediately, identify and correct problem. Equipment damage may result. Do not step on end cap fabric.

10. Locate outermost hubs on end cap. Reach beneath hub and grasp top part of strut under hub (as shown in Figure 10), lift on hubs together, and walk backwards to expand end cap.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Shelter End Caps and Side Doors - Continued

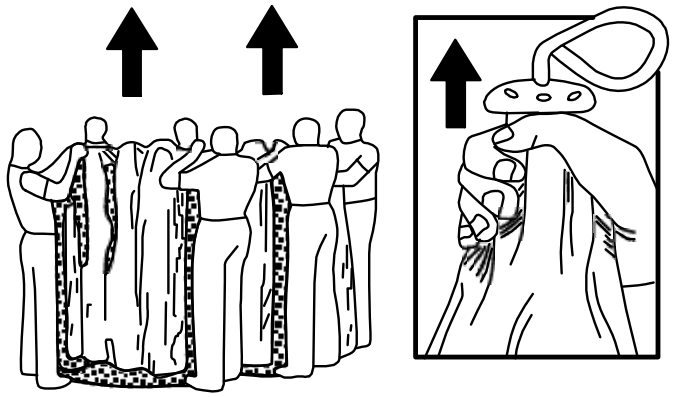


Figure 10. End Cap Lifting Points.

11. Locate red flags in interior covers (Figure 11, Item 1). These flags are lifting points from which all crew will lift end cap into position. Place one hand underneath push point hub and hold push pole in other hand.

12. On command, all crew should simultaneously lift end cap at push point hubs, place one end of their push poles directly underneath lifting point, lift shelter, and place other end of push pole on ground keeping push pole straight (see Figure 11, Item 2.

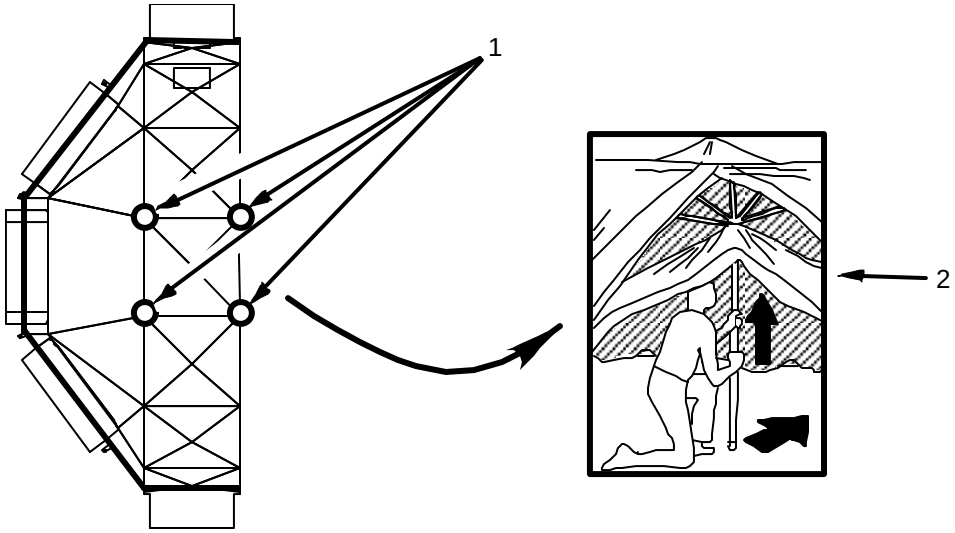


Figure 11. Raise and Set End Cap on Push Poles.

13. Inspect end cap perimeter for obstructions or restrictions when raising end cap.

NOTE

As end cap is lifted, the walls will come inwards.

14. In unison, lift with four push poles and move end cap (Figure 12, Item 2) into position next to main shelter (Figure 12, Item 1).

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Shelter End Caps and Side Doors - Continued

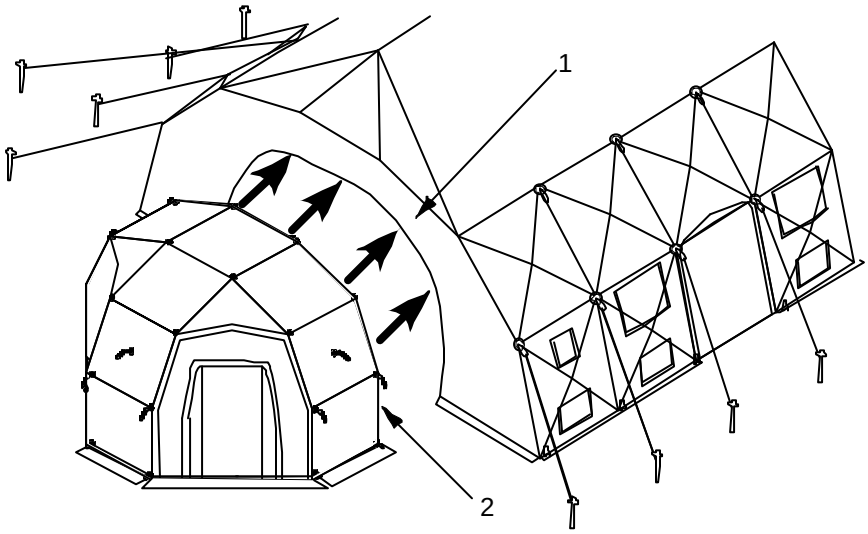


Figure 12. End Cap Positioned Next to Main Shelter.

NOTE

When connecting end caps to shelter, begin by connecting exterior covers prior to interior covers. For a proper weather-tight fit, when attaching hook-and-loop strips, always ensure that interior and exterior hook-and-loop connections are flat and even. The finished connection should be smooth and snug.

15. Using ladder, connect exterior cover of end cap to T plate by aligning black tab sewn into exterior cover of end cap to black tab sewn into center of T plate opening. Start at uppermost point and attach end cap to T plate working from top center towards bottom.

16. Stake end cap down and attach all wind lines to stakes.

17. Repeat steps 4 through 16 for second end cap.

18. Remove two transport bags with interior face plates from designated area. Remove interior face plates from transport bags, and spread out onto ground inside shelter under T plate.

19. Locate red tabs sewn into interior cover at the top of shelter and into top of face plate. Start at uppermost point and attach faceplate to interior cover working from top center towards the bottom.

20. Spread end cap floor inside end cap, green side up and ensure proper fit.

21. Staring at center point of outer end cap, attach hook and loop strips to interior cover of end cap. Work in opposite direction around end cap sides towards main shelter. Periodically pull floor tight towards main shelter to remove any slack or bumps.

22. Repeat steps 18 through 21 for second end cap.

23. Remove transport bags containing interior and exterior side doors and remove doors from bags.

24. Locate red tab on exterior door and match it to red tab on hook-and-loop connector strip on exterior side of shelter.

25. Start at red tab and attach exterior door to hook-and-loop strip.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

I**nstall Shelter End Caps and Side Doors – Continued**

26. Repeat steps 23 and 24 for remaining side doors.

END OF TASK

Install the Main Floor

1. Locate main shelter floor, move inside and remove wrap. Return wrap to designated area
2. Unfold floor down one side of shelter (green side up).
3. Pull floor tight to remove any slack or bumps.
4. Attach hook-and-loop strip on floor to hook-and-loop seam on shelter, working in opposite directions to complete one side (Figure 13).
5. Secure hook-and-loop strip on floor to hook-and-loop seam on both faceplates.
6. Secure hook-and-loop strip on floor to hook-and-loop seam on both end cap ground covers.
7. Complete securing hook-and-loop strip on floor to hook-and-loop seam down remaining side of shelter.

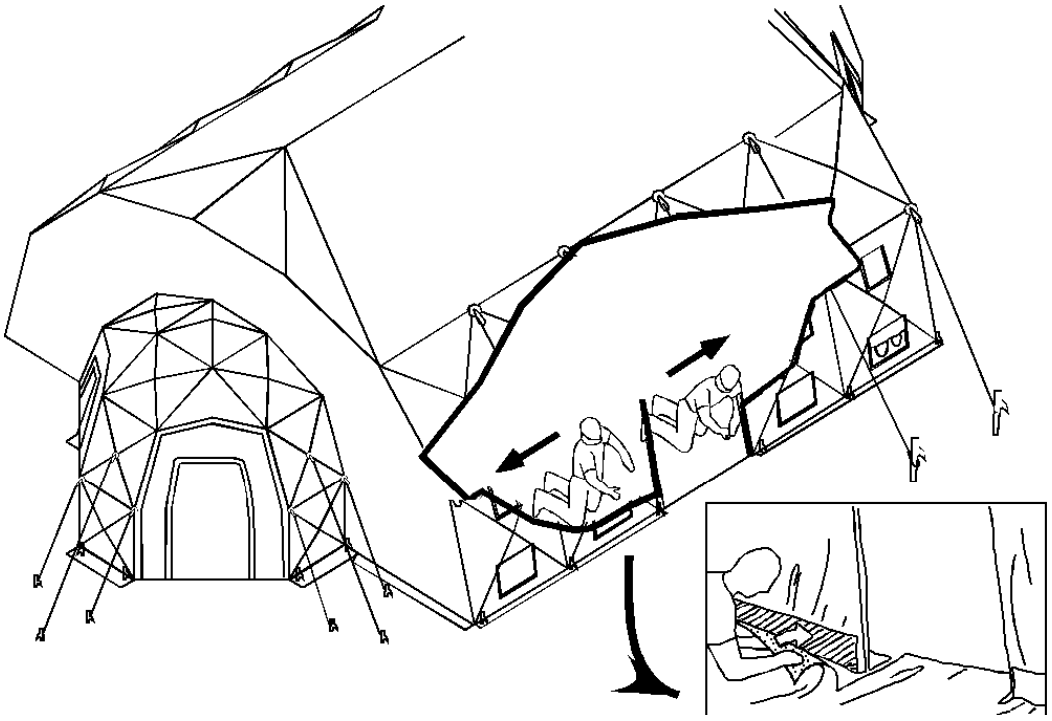


Figure 13. Attach Floor to Shelter.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Internal Load Supports

NOTE

Shelter is provided with four complete internal load supports. Two internal load supports, one at each end, are always required for any installation. Remaining two internal load support provide strength to shelter frame in heavy snowfall or freezing rain. If any such weather is expected, all four internal load supports must be installed.

Each internal load support consists of seven posts. Once frame is assembled and put into position, two quick release pins secure it to shelter. Slide pins are in canvas bag. To insure a proper setup, numbers must match up.

1. Remove components for one internal load support from transport bag.

2. Lay all pieces of one internal load support structure inside shelter as shown in Figure 14.

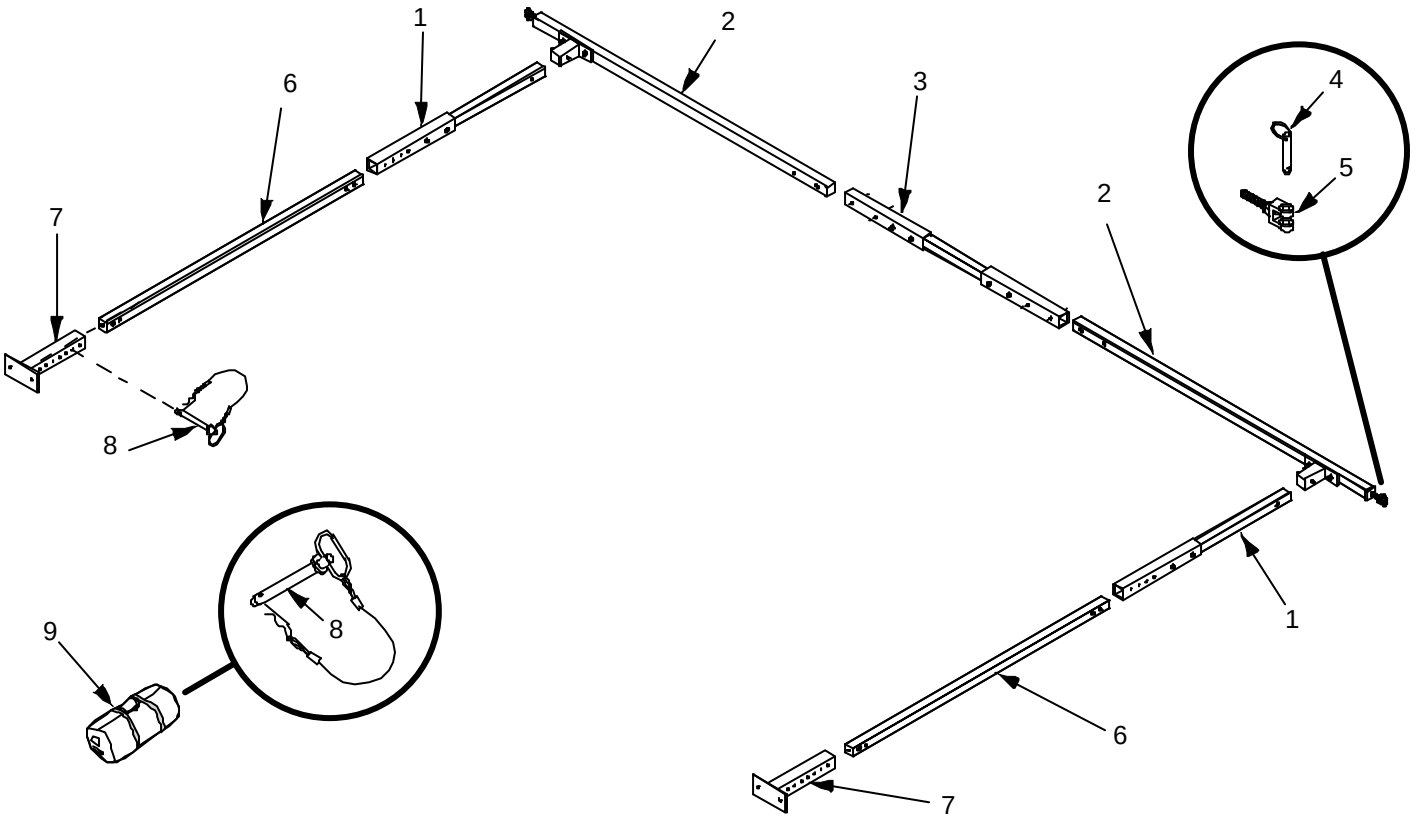


Figure 14. Components of One Complete Internal Load Support.

3. Assemble both vertical posts by aligning one vertical low support (Figure 14, Item 6) with one bottom leveler (Figure 14, Item 7) and align one vertical high support (Figure 14, Item 1) with one vertical low support beam (Figure 14, Item 6).

4. Secure vertical posts with four quick release pins (Figure 14, Item 8) found in transport bag (Figure 14, Item 9)

5. Repeat this procedure for second vertical post.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Internal Load Supports – Continued

NOTE

Note orientation of two top supports (Figure 14, Item 2) with respect to placement of center top support (Figure 14, Item 3)

6. Assemble horizontal post joining two top supports (Figure 14, Item 2) to one center top support (Figure 14, Item 3).

7. Secure horizontal post components with four quick release pins found in transport bag.

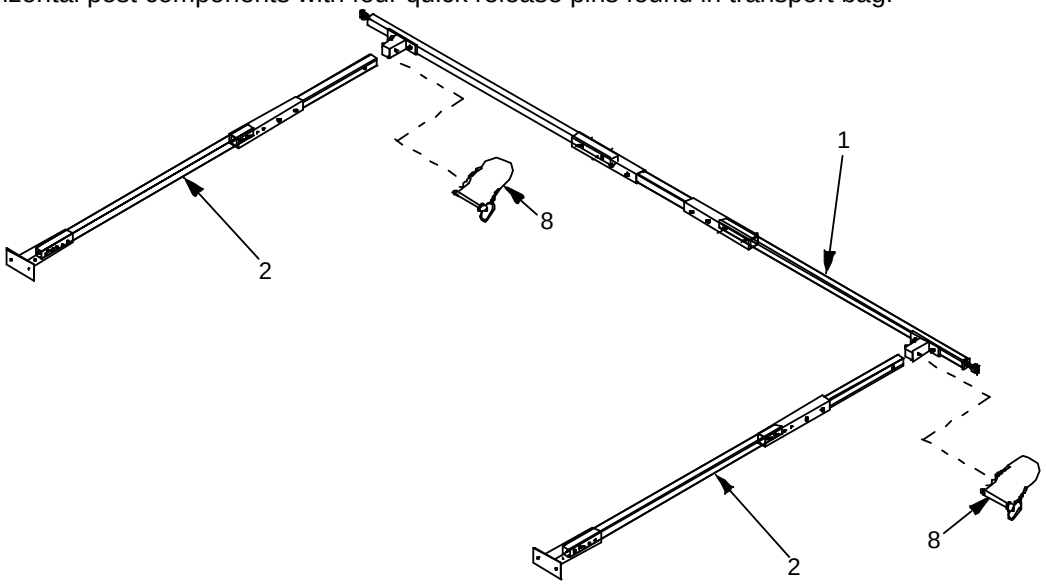


Figure 15. Join Vertical Posts to Horizontal Post.

8. Place upper end of one vertical post (Figure 15, Item 2) into one corner bracket of horizontal beam (Figure 15, Item 1) and secure with one quick release pin (Figure 15, Item 8) from transport bag.

9. Repeat procedure to secure second vertical post to horizontal post.

10. Using a motion similar to raising a wall, lift end wall into position at one end of shelter (Figure 16).

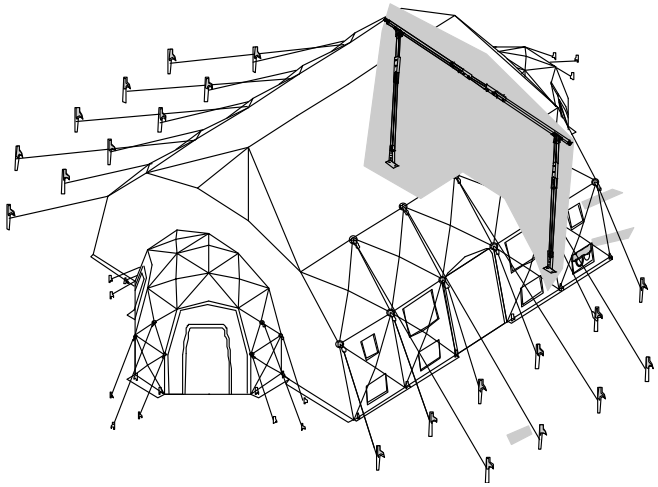


Figure 16. Internal Load Support in Position in Shelter.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Install Internal Load Supports - Continued

WARNING

The following steps require use of a ladder to reach interior ceiling of shelter. At least one crew member should be assigned to secure ladder while another crew member works above. Serious personal injury could result if ladder topples over.

11. Align one end wall clevis (Figure 17, Item 1) with mating eye bolt (Figure 17, Item 2) built into shelter.

12. Unscrew end wall clevis as necessary until it aligns with eye bolt built into shelter. Once aligned, insert quick release pin (Figure 17, Item 3) through both of eye bolts.

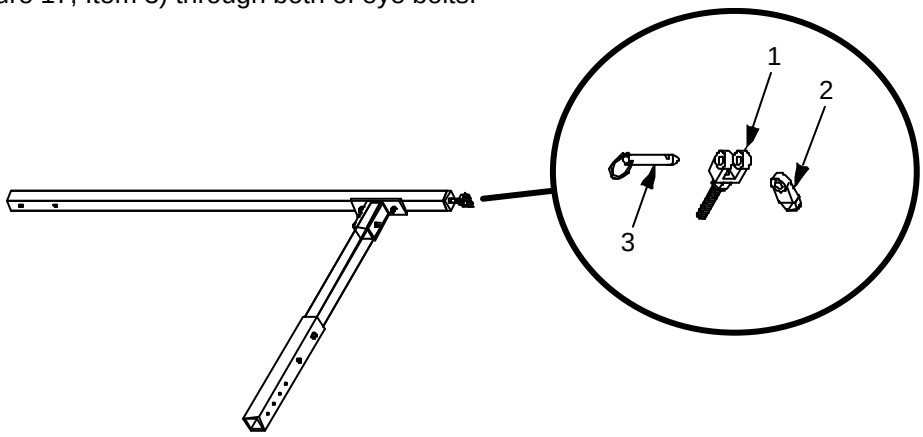


Figure 17. Align Internal Load Support Clevis with Eyebolt on Shelter.

13. Repeat procedure for second internal load support.

END OF TASK

Remove Wheel Assemblies

WARNING

Each wheel assembly weighs approximately 50 lbs. (22.68 kg). Removing wheel assemblies from walls requires two personnel. Serious personnel injury could result from not having enough manpower.

1. Hold a wheel assembly.

2. Second crew help support wheel assembly with one hand while releasing pin holding wheel assembly to shelter wall.

3. Lower wheel assembly to ground.

4. Replace pin in wheel assembly.

5. Repeat procedure to remove remaining three wheel assemblies.

6. Move four wheel assemblies to designated area.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

SETUP OF OPTIONAL SHELTER INTERCONNECTIONS

GENERAL

There are two connector sets provided with the J SHELTER. The purpose of the connector sets are to allow the operator to connect the shelter to other shelters, vehicles and legacy SICPS tents. The connector sets are as follows:

- **J SHELTER Connector Set (End-to-End)**: The End-to-End connector set consists of one exterior cover and one interior cover designed to attach to a J SHELTER, end cap and side doors. The connector set can also be used to connect a J SHELTER to a TMSS-MED shelter or a legacy SICPS shelter.

- **Boot Connector**: The boot connector is used to attach a J SHELTER to the side door of a TMSS-MED shelter.

NOTE

Ensure enough space is allocated between two shelters or vehicles being connected. Check wind line and stake clearance for main shelter and end caps. The vehicle boot wall system may interfere with wind line for the main shelter. Adjust positioning of the wind line stakes to make clearance for them.

Connecting J SHELTER Connector Set (End-to-End) To End Cap and Side Doors

1. Remove from designated area and unpack the two components of J SHELTER connector set from transport bag. Set should consist of an interior cover with adjustment straps and an exterior cover.

NOTE

J SHELTER connector set (End-to-End) is not self standing. Sufficient space must be maintained between the components being connected to draw the connector taut. This will prevent water from building up inside the connector resulting in leaks.

The side door is slightly taller and skinnier than the end cap door but the assembly procedures are the same.

2. Identify which doors will be used to connect the two shelters.

3. Remove interior and exterior doors from each end cap by separating surrounding hook-and-loop strip from end cap. Fold doors and insert into frame structure of end cap to prevent loss.

4. Secure exterior portion of connector set.

NOTE

The J SHELTER connector set (End-to-End) has an additional set of connections to allow it to be attached to the legacy SICPS. When using this connection to attach from J SHELTER side door or end cap door to another J SHELTER, additional fabric on either side should be left rolled and attached to the side of the connector with attached hook-and-loop strips.

5. Separate the two layers of the hook-and-loop strip attached to the first shelter's exterior door opening.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Connecting J SHELTER Connector Set (End-to-End) To End-Cap and Side Doors – Continued

6. Identify the centering tab on the door opening and the connector.

7. Align the two tabs and secure the exterior cover into the door opening so that the tan (exterior) face is up. Ensure that all hook-and-loop is flat and properly seated to prevent leaks.

8. Repeat steps 5 – 7 for the second shelter.

NOTE

The exterior cover should be fairly taught between shelters. If cover is excessively loose, increase distance between shelters if possible to draw exterior cover taut.

9. Secure the interior portion of the connector set.

10. Repeat steps 5-7 for the interior portion of the connector set attaching it to the two interior door opening so that the white face is oriented down.

11. Pull the adjusting straps tight between the two shelters to raise the interior cover above head height.

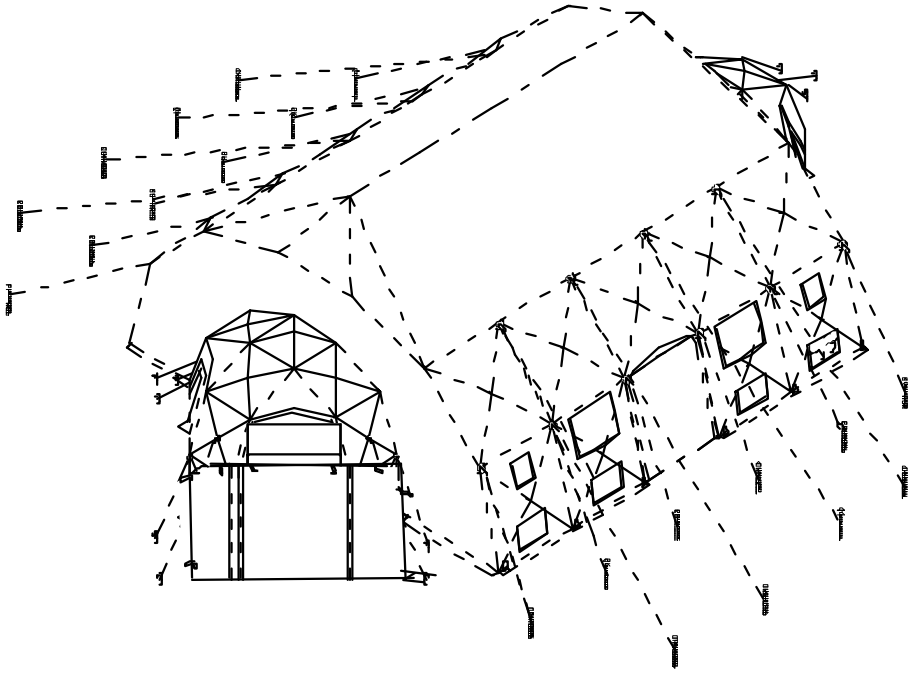


Figure 18. J SHELTER Connector Set (End-to-End) To End Cap and Side Doors.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Connecting J SHELTER Connector Set (End-to-End) to Legacy Style SICPS

NOTE

When attaching the TMSS Connector Set (End-to-End) to a legacy SICPS the interior portion of set will not be used and should be stored in its appropriate bag.

The J SHELTER connector set (End-to-End) has an additional set of connections to allow it to be attached to the legacy SICPS. When using this connection the extra fabric on either side not being used should be rolled and secured using attached hook-and-loop strips.

1. Erect legacy SICPS so that end is oriented towards end cap door it is being attached to (See Figure 19).
2. Remove exterior door from end cap that is being connected to SICPS by separating double hook-and-loop strip securing door to door opening.
3. Separate two layers of hook-and-loop strip attached to end caps exterior door opening.

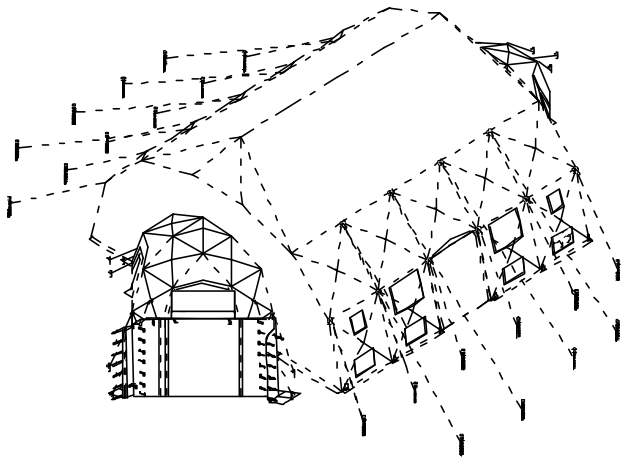


Figure 19. J SHELTER Connector Set (End-to-End) to Legacy Style SICPS.

4. Identify centering tab on door opening and connector.
5. Align two tabs and secure the exterior cover into door opening so that tan (exterior) face is up. Ensure that all hook-and-loop is flat and properly seated to prevent leaks.
6. Release hook-and-loop strips securing SICPS connector portion to side of the connector.
7. Wrap sides of SICPS connector portion around SICPS frame.
8. Align the hook-and-loop strip on the connector and the SICPS side wall and attach hook-and-loop strip and plastic quick release clamps.
9. Repeat process for opposite side of SICPS.
10. Pull top portion of SICPS connector up under roof of SICPS and secure to SICPS frame using plastic quick release clamps.
11. Move SICPS away from attached item to remove slack in connector fabric.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Connecting Boot Connector

1. Identify side door opening to be used with boot (see Figure 24).

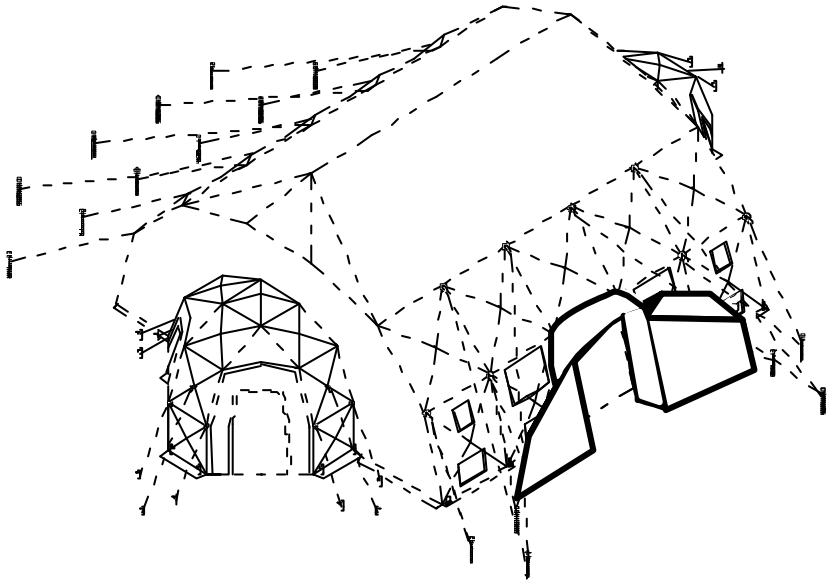


Figure 20. J SHELTER Boot Connector.

2. Separate hook-and-loop attaching exterior door to opening, fold door and store inside frame of shelter.
3. Separate hook-and-loop attaching interior door to opening, fold door and store inside frame of shelter.
4. Erect boot connector next to shelter door opening so that end is centered on door.
5. Identify centering tab on shelter exterior end and boot exterior connector.
6. Attach boot exterior connector to exterior cover of J SHELTER using double hook-and-loop strip.
7. Attach boot exterior connector to exterior door opening using double hook-and-loop strip on door opening.
8. Repeat steps 5 and 6 for boot interior connector.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Connect ECU Ducts between Shelter and Trailer - Continued

1 To cool a shelter:

a. Pull single supply duct (Figure 21, Item 3) through shelter supply port (Figure 21, Item 1).

b. Pull return ducts (Figure 21, Item 4) through shelter return ports (Figure 21, Item 2). Ensure there is approximately two feet of supply duct and one foot of return duct pulled into shelter at each port.

2 If heating shelters:

a. Pull supply duct (Figure 21, Item 3) through lower shelter port (Figure 21, Item 2).

b. Pull return duct (Figure 21, Item 4) through upper shelter port (Figure 21, Item 1) and lower shelter port (Figure 21, Item 2). Ensure that there is approximately two feet of supply duct and one foot of return duct pulled into shelter at each port.

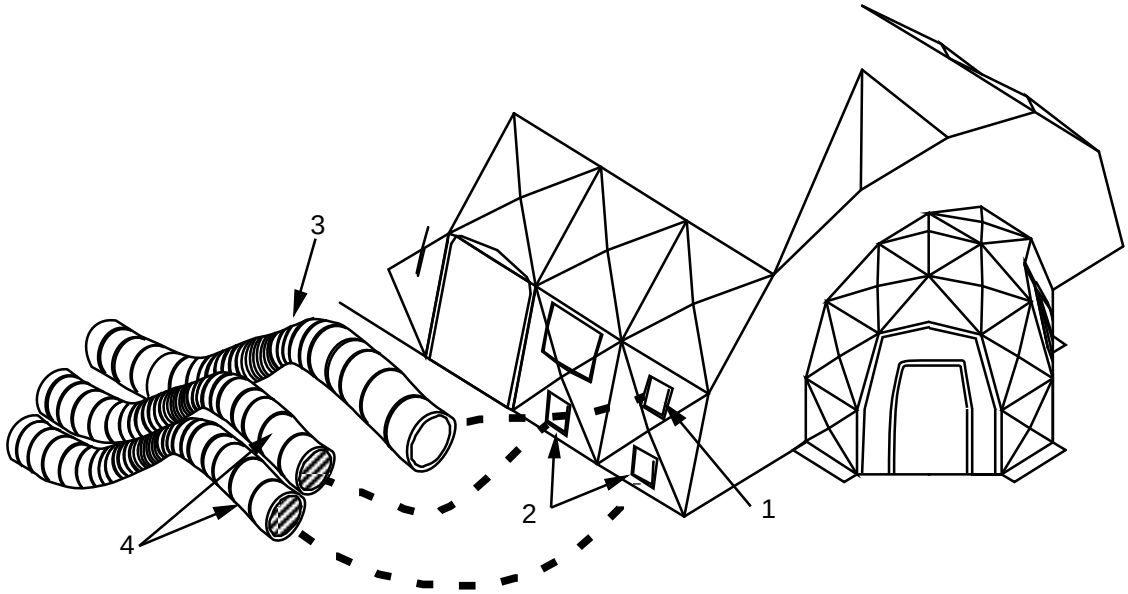


Figure 21. Connect Ducts to Shelter.

8. Secure ducts to shelter port sleeves by tightening belts.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Plenum Installation

The plenum distributes conditioned air inside shelter more evenly.

WARNING

The following steps require use of a ladder to reach top interior of shelter. At least one crew should be assigned to secure ladder while another crew member works above. Serious personal injury could result if ladder topples over.

1. Connect plenum (Figure 22, Item 1) to supply duct (top) (Figure 22, Item 4) at 45 degrees diagonally.

2. Secure plenum mounting straps (Figure 22, Item 2) to looped keepers located in interior roof of shelter. Start attaching plenum straps to looped keepers at end closest to supply port and working towards opposite end of corner of shelter.

3. Verify that there are no kinks or physical obstructions in plenum after it is hung.

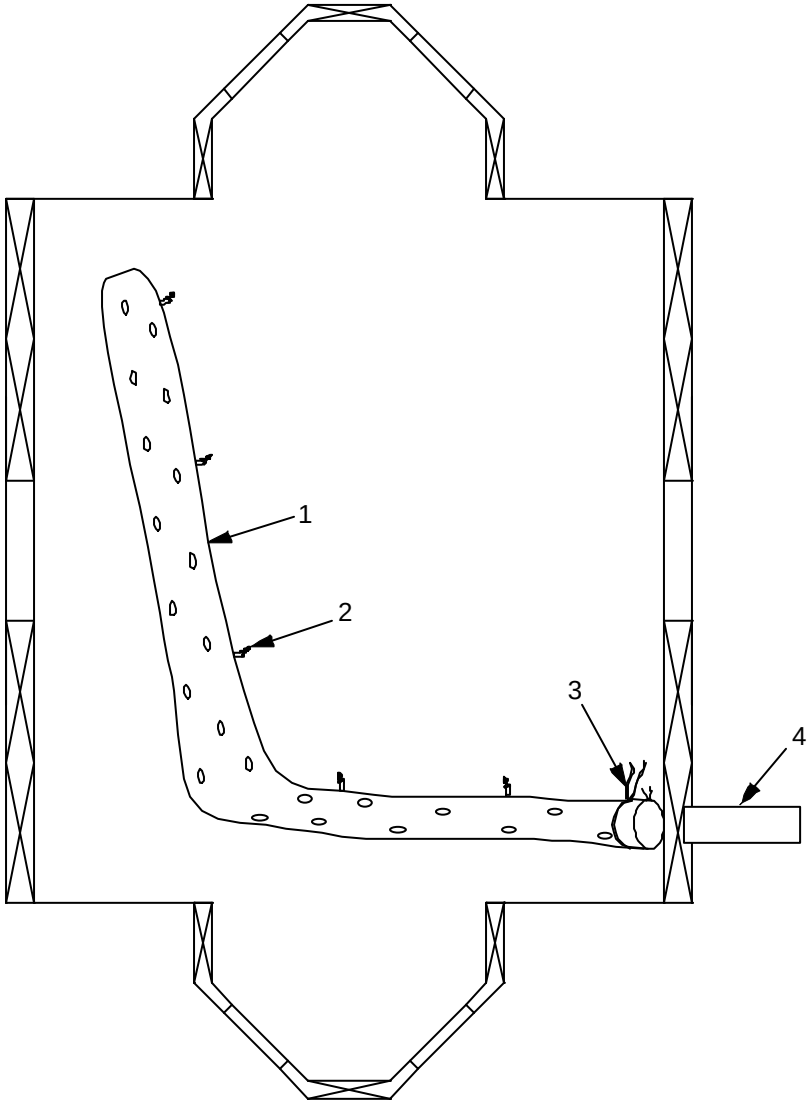


Figure 22. Install Plenum.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

POWER CONNECTIONS

NOTE
This equipment is optional. Your unit may or may not have this equipment

Power Distribution Unit

The Power Distribution Unit (PDU) for use with power source. PDUs provide a method of distributing power to branch circuits, utility extension cords, and lighting fixtures in shelter. PDU utilizes standard military 60A power cable connectors, allowing it to connect to additional power sources.

1. Position PDU (Figure 23, Item 1) in an interior corner of shelter.

2. Pull source power cord (Figure 23, Item 3) to PDU through closest power cable sleeve in shelter (Figure 24, Item 1) to where PDU is located.

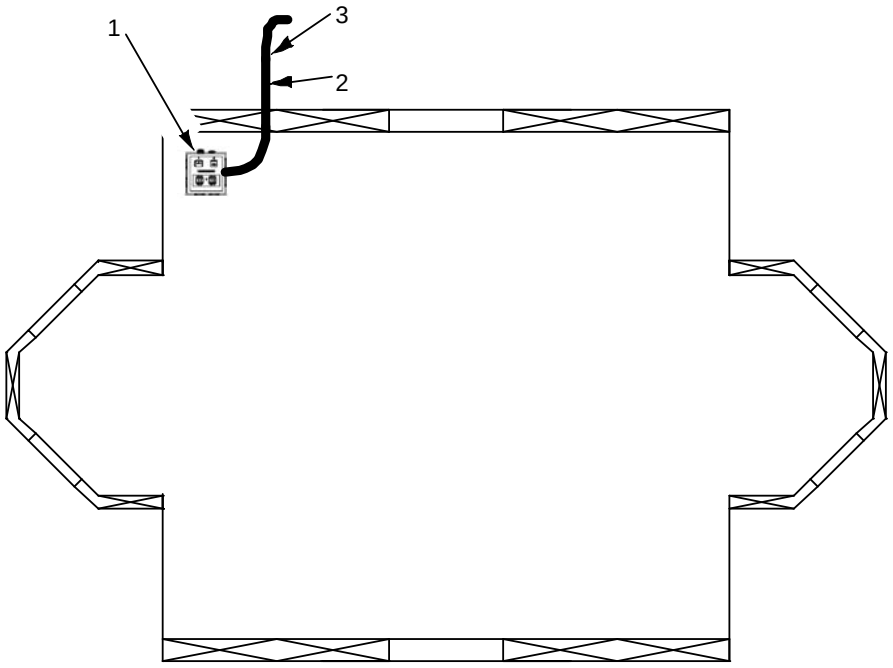


Figure 23. Location of PDU Inside Shelter.

3. Route cable through shelter so that it does not interfere with movement of personnel through shelter.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

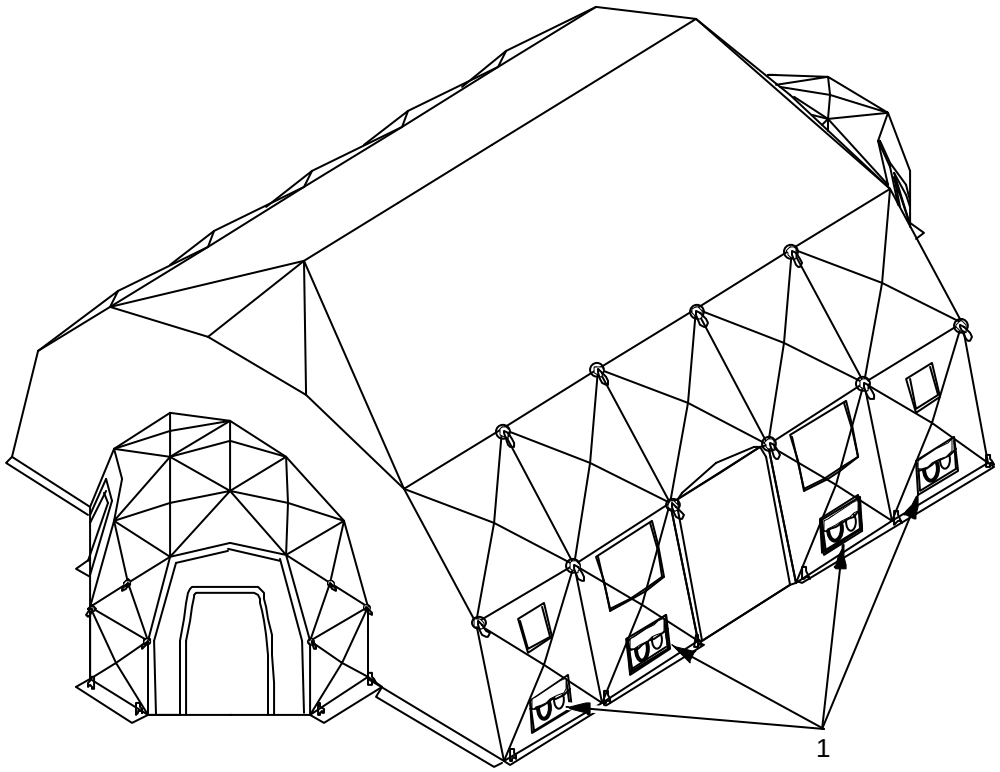


Figure 24. Power Cable Sleeves on Shelter.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

TEARDOWN OF OPTIONAL SHELTER INTERCONNECTIONS

J SHELTER Connector Set (End-to-End) Side Doors

Tear Down

1. Release adjustment straps connected to interior cover.
2. Remove interior connector set by opening and separating hook-and-loop strip attaching cover to door opening.
3. Repeat process for second shelter door opening.
4. Fold interior connector set with black side facing out.
5. Remove exterior connector set by opening and separating hook-and-loop strip attaching cover to door opening.
6. Repeat process for second shelter door opening.
7. Fold exterior connector set so that black side is facing out.
8. Store interior and exterior connector sets into appropriately marked transport bag.
9. Secure removed end cap doors from end cap frame.
10. Identify centering tabs on doors and attach to appropriate door opening.

END OF TASK

J SHELTER Connector Set (End-to-End) to Legacy Style SICPS

TearDown

1. Remove connector set from side door by opening and separating hook-and-loop strip attaching cover to door opening.
2. Disconnect all plastic connectors attaching connector set to legacy SICPS tent.
3. Roll SICPS portion of connectors and attach to sides of connector using attached hook-and-loop strips.
4. Fold exterior connector so that black side is facing out.
5. Store interior and exterior connectors into appropriately marked transport bag.
6. Secure removed side door from end cap.
7. Identify centering tabs on doors and attach to appropriate door opening.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Boot Connector

TearDown

1. Separate double hook-and-loop strip securing boot interior and exterior connectors to shelter side door opening.
2. Secure removed doors.
3. Mount doors in their respective door openings.
4. Separate double hook-and-loop strip securing JT boot interior to J SHELTER end.
5. Fold Interior boot and store in transport bag.
6. Repeat steps 4 and 5 for exterior boot.

END OF TASK

SHELTER TEARDOWN

Preparation

1. Locate equipment transport bags, ladder, wheel assemblies, and stake puller in designated area and place near shelter.
2. Ensure that all ancillary equipment has been properly shutdown, de-energized and disassembled.
3. Remove all equipment such as cables, tables, chairs, etc., from shelter and place out of immediate work area.

END OF TASK

Plenum Removal

WARNING

The following steps require use of a ladder to reach top interior of shelter. At least one crew should be assigned to secure ladder while another crew member works above. Serious personal injury could result if ladder topples over.

1. Inspect plenum, verify that there are no rips or tears in plenum. If necessary, repair or notify appropriate personnel that plenum is in need of replacement.
2. Disconnect plenum (Figure 23, Item 1) from supply duct (Figure 23, Item 4).
3. Loosen plenum mounting straps (Figure 23, Item 3) and remove from looped keepers (Figure 23, Item 2) located in interior roof of shelter.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Internal Load Supports Removal

1. Starting with one internal load support, unscrew and remove clevis from both left and right side shelter eye bolts.
2. Using a motion similar to lowering a wall, lower internal load support assembly to ground.
3. Remove quick release pin securing all load support components together. Return quick release pin to respective transport bag.
4. Detach all internal load support components from each other and return to designated area.
5. Repeat procedure for remaining internal load support(s). Place strap around internal load support components and secure in designated area.

END OF TASK

Wheel Assembly Installation

WARNING

Each wheel assembly weighs approximately 50 pounds. Replacing wheel assemblies on walls requires two personnel. Serious personnel injury could result from not having enough manpower.

1. Locate four wheel assemblies; remove pins from wheel assemblies and position inside of shelter.
2. Raise one wheel assembly from ground into position and secure wheel assembly to shelter wall.
3. Repeat procedure to attach remaining three wheel assemblies to shelter wall with pin.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Floor Removal

1. Disconnect main shelter floor from shelter by starting on one side of either side door and detaching hook-and-loop strip on floor from hook-and-loop seam on shelter working in opposite directions to complete one side.

2. Detach hook-and-loop strip on floor from hook-and-loop seam on both faceplates.

3. Detach hook-and-loop strip on floor from hook-and-loop seam on both end cap ground covers.

4. Complete detaching all remaining hook-and-loop strip on floor from hook-and-loop seam on shelter.

5. Fold floor lengthwise in half four to five times.

6. Locate shelter floor wrap, place on ground, and roll main shelter floor into wrap. Secure floor in wrap and place out of immediate work area.

END OF TASK

Side Door Removal

1. Detach hook-and-loop strip on one side door of main shelter from hook-and-loop seam on shelter. Repeat procedure for remaining interior and exterior side doors. DO NOT REMOVE END CAP DOORS.

2. Fold side doors in half and in half again, place into transport bags, and return to designated area.

3. Start at lower end of one interior faceplate and detach hook-and-loop strip of interior faceplate from hook-and-loop seam on interior cover. Work from one end of faceplate to other end until faceplate is completely detached. Repeat procedure for opposite interior faceplate. Fold faceplates, place into transport bags, and return to designated area

END OF TASK

END OF TASK

Tear Down of End Caps

1. Unzip (do not remove) all end cap doors.

2. Detach one end cap floor from end cap by starting on one side and detaching hook-and-loop strip on floor from hook-and-loop seam on end cap working around to opposite side. Fold floor in half and then in half again and place inside main shelter.

3. Starting at bottom of one side, detach exterior hook-and-loop strip connecting end cap to main shelter T plate hook-and-loop seam.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Tear Down of End Caps - Continued

4. Disconnect end cap wind lines from stakes. Do not untie wind lines from end cap. Remove stakes from end cap using stake puller and place in transport bag.

WARNING

Grasp end cap at hubs – never at grommets, loops, or struts. Do not step on end cap fabric. Personal injury may result from pinch points or slipping.

5. Position crew around outside of end cap, one each at "Lifting Point" stencil on fabric.

6. At command of team leader, in one unified movement, lift end cap upward and step backwards. The end cap will come down.

7. To compress end cap, lift end cap upward and walk forward in one movement. Ensure wind lines are not caught in struts.

8. Locate end cap transport bag, remove belts and place first belt loosely around top of end cap as shown in Figure 25.

9. Turn end cap over, white side up, and pack shelter fabric into frame.

10. Place second belt around end cap and tighten.

11. Lay end cap on its side and tighten both belts securely as shown in Figure 25. Place inside main shelter.

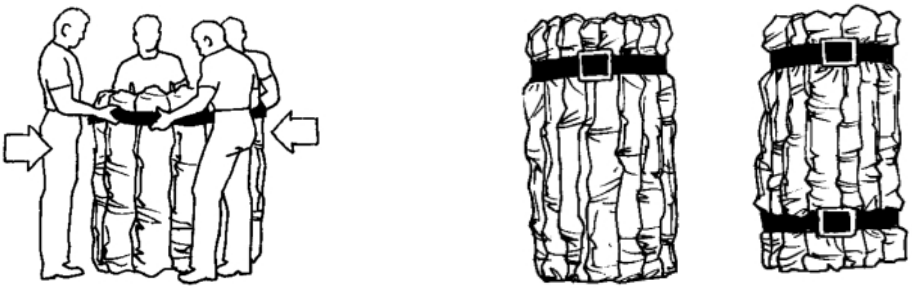


Figure 25. Secure End Caps with Belts.

12. Remove six red stakes from end cap ground cover using stake puller. Place stakes in transport bag and store in designated area.

13. Fold end cap ground cover in half and in half again and place next to end cap.

14. Place end cap floor on ground cover. Place end cap on floor and roll end cap up into floor/ground cover. Flip upright so that white side is up.

15. Pull transport bag over upright end cap.

16. Lay end cap transport bag on side, place push poles in bag, and close transport bag with drawstring.

17. Repeat steps 2 through 16 for second end cap.

18. Move both end cap transport bags out of immediate work area.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Tear Down of Main Shelter

1. Close all windows and secure using hook-and-loop strips.

2. Remove low wind lines (black lines) from shelter and stakes, stow in transport bag and remove from immediate work area. Disconnect high wind lines (green lines) from rebar stakes. Do not attempt to remove green lines from shelter at this time.

3. Use stake puller to remove only those stakes being used for securing wind lines. Place these stakes in designated area.

NOTE

Do not detach T plate completely from main shelter.

4. Partially detach exterior T plate (Figure 26, Item 2) on both sides of shelter starting from ground and proceeding to approximately two feet above where black wind lines attach to shelter (Figure 26, Item 1). Repeat procedure for second exterior T plate on opposite side of shelter.

5. Retrieve bladder (Figure 26, Item 3), blower (Figure 26, Item 5), 30 foot power cord (Figure 26, Item 6), and blower duct (Figure 26, Item 7) from designated area.

6. Spread and position bladder in center of shelter.

7. Verify all zippers (Figure 26, Item 4) on bladder are closed.

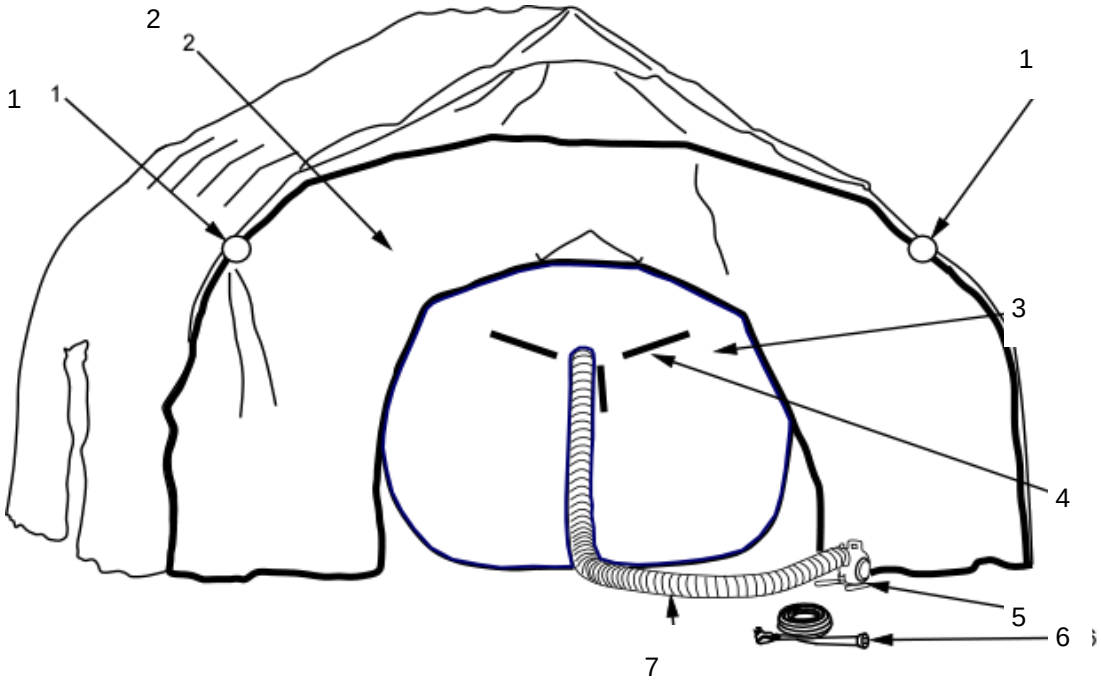


Figure 26. Bladder Fully Inflated and Supporting Shelter.

CAUTION

Verify blower straps are secure so they will not come off when using blower.

8. Attach one end of blower duct to bladder neck and secure duct with tie down.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Tear Down of Main Shelter - Continued

9. Attach other end of blower duct to blower outlet and secure duct with tie down.

CAUTION

Designate one person to remain with blower during bladder inflation. Have person verify blower switch is in OFF position. Equipment damage and personal injury my result.

10. Attach power cord to blower and connect to Power.

WARNING

Do not enter shelter once wind lines are freed and stakes removed. Shelter could collapse and cause serious injury and/ or damage to equipment.

11. Disconnect high wind lines (green), remove all remaining stakes using stake puller and remove from immediate work area.

12. Turn blower switch ON and allow bladder to fully inflate. Bladder requires 15 to 20 minutes to inflate. When bladder is fully inflated, shelter will be slightly off ground, totally supported by bladder.

WARNING

The following steps must be performed by entire crew at same time. Equipment damage and physical injury could result from not having crew work together.

13. Distribute crew around shelter perimeter as shown in Figure 27.

14. On command, in unison, grasp shelter hubs and pull backwards until shelter weight is supported by bladder and shelter is resting on ground on its inner hubs.

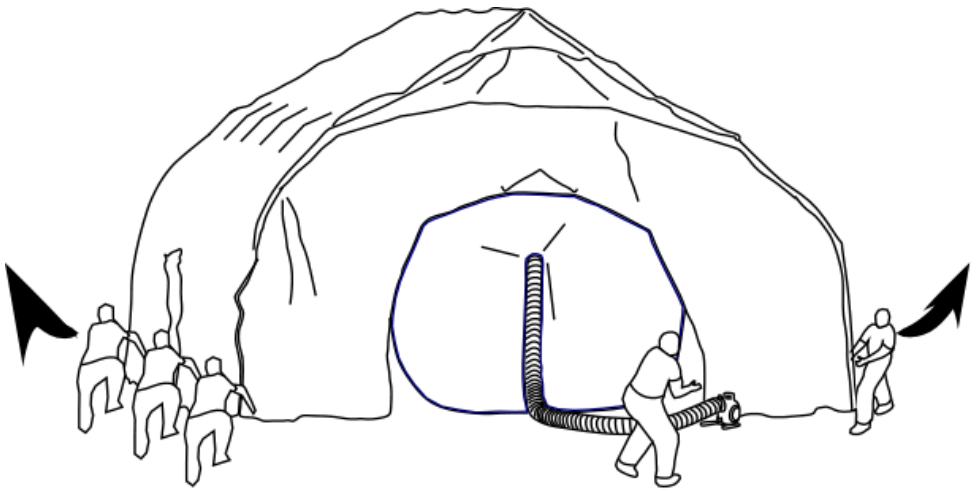


Figure 27. Pull and Lift Shelter Outward.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Tear Down of Main Shelter - Continued

15. Turn blower OFF and open zippers slightly. Team leader continuously checks entire shelter perimeter for possible snags on shelter.

16. Control collapse of shelter by slowly opening bladder zippers. Have crew members guide exterior walls of shelter up and outward as shelter collapses.

17. When bladder and shelter are completely collapsed, remove blower, blower duct, 30 foot power cord and return to designated area. Allow bladder to settle for 10/15 minutes to let more air out.

WARNING

Detaching high wind lines requires one crew member to walk across spread out shelter disconnecting wind line connections. The crew member should only step in valleys where strut pair supports are under foot. Failure to heed this warning could result in damage to shelter and personal injury.

18. Remove green wind lines, stow in transport bags and return to designated area

END OF TASK

SYSTEM PACKING

Packing Main Shelter

1. Retrieve two shelter retaining straps.

2. After all air has been released from bladder, position crew evenly around shelter.

WARNING

Use caution so that fingers and hands do not get pinched between struts as shelter compresses. Personal injury may result.

Be sure bladder does not catch on wheels during shelter compression. Equipment damage may result.

3. Compress shelter by grasping struts and pushing shelter slowly towards center as shown in Figure 28.

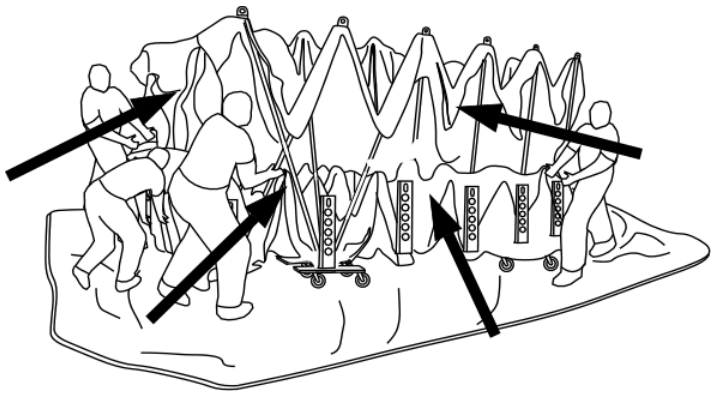


Figure 28. Compress Shelter.

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Packing Main Shelter - Continued

WARNING

Hold top ratchet in place to prevent from dropping. Serious personal injury could result if not held.

4. Place belt (Figure 29, Item 1) around top of shelter (Figure 29, Item 2) first and tighten belt with ratchet handle as crew pushes inward.

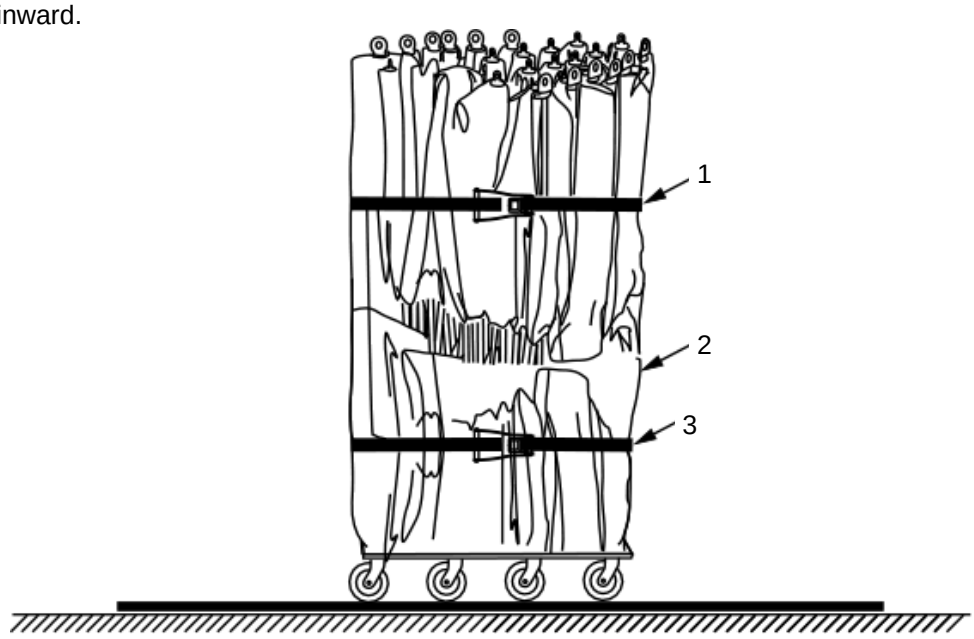


Figure 29. Packing Main Shelter.

5. Place bottom belt (Figure 29, Item 3) around shelter and tighten belt with ratchet handle as crew pushes inward.

6. Continue to use top ratchet handle and then bottom to tighten each belt. The shelter will compress more as ratchet mechanism pulls shelter frame closer together. Shelter is completely compressed when wheel assemblies are touching.

7. Surround shelter with top wrap by walking around shelter. Make sure wrap webbing faces outward.

8. Secure top wrap to shelter by wrapping top strap around wrap and tighten ratchet to hold in place.

9. Repeat for bottom shelter wrap and bottom strap (Figure 29, Item 3).

WARNING

Have all crew push/pull shelter from lower half of shelter only to prevent shelter from toppling over. Damage to equipment and personal injury may result if shelter falls over.

10. Ensure bladder fabric does not become caught in wheel assemblies when rolling shelter off of bladder.

11. Slowly roll shelter across bladder towards grass area. Have forward crew lift on shelter retainer straps to ease shelter transition from bladder to ground.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

Wrap Bladder

1. Position crew members on edge of bladder opposite blower duct neck.
2. Walk carefully forward on bladder towards filler neck to force residual air from bladder.
3. Start at one side and fold bladder in thirds lengthwise as shown in Figure 30. It is important to keep bladder neck free and clear so that air may continue to escape as bladder is folded.

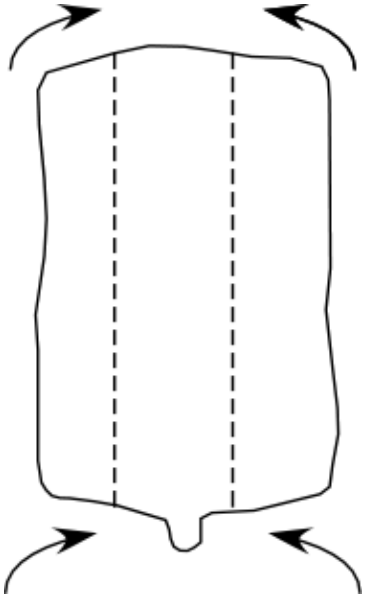


Figure 30. Remove Air and Fold Bladder.

4. Fold bladder in half lengthwise. Pull out any folds or wrinkles by grabbing both ends of bladder and pulling material as needed to straighten.
5. Start at end of bladder furthest from neck, pick up bladder material and fold bladder in thirds lengthwise (towards filler neck).

NOTE

Keep bladder straight while rolling.

6. Starting at end that is farthest from filler neck, roll up bladder forward toward neck.
7. Spread out bladder wrap with ratchet straps facing down.

WARNING

The following procedure is a two person lift. Failure to follow this warning may result in personnel injury.

8. Place rolled-up bladder on wrap.
9. Draw wrap around bladder and fasten/secure using ratchet straps.
10. Return rolled up bladder to side out of immediate work area.

END OF TASK

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

WARNING

All crew are required to roll shelter in to designated area to prevent injury to personnel and damage to equipment.

Push from lower half of shelter only to prevent shelter from toppling over. Damage to equipment and personal injury may result if shelter falls over.

Ensure bladder fabric does not become caught in wheel assemblies when rolling shelter off of bladder. Damage to equipment may result.

Bladder and floor are two-person lifts. Serious personal injury may result. Handle bladder carefully to ensure no damage is done to it; otherwise, bladder may leak.

END OF WORK PACKAGE

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

OPERATOR INSTRUCTIONS
J SHELTER
OPERATION UNDER UNUSUAL CONDITIONS

INITIAL SETUP:

Personnel Required
Two

References

GENERAL

This work package covers operating J SHELTER system in arctic climates.

Buildup of Snow on the Shelter

The shelter is provided with four complete internal load supports. Two internal load supports (Figure 1, Item 1), one at each end of shelter, are always required for any installation. The remaining two internal load supports (Figure 1, Item 2) provide extra strength to the shelter frame in instances of heavy snowfalls and/or freezing rain. If there is the possibility of any such weather instances occurring at the intended shelter site, the additional two internal load supports must be installed. Serious damage to the shelter and personal injury or death may result.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Buildup of Snow on the Shelter – Continued

WARNING

The Additional Internal Load Supports should be stricken if shelter is to be left unattended for an extended period when there is a possibility of inclement weather. Serious damage to the shelter may result.

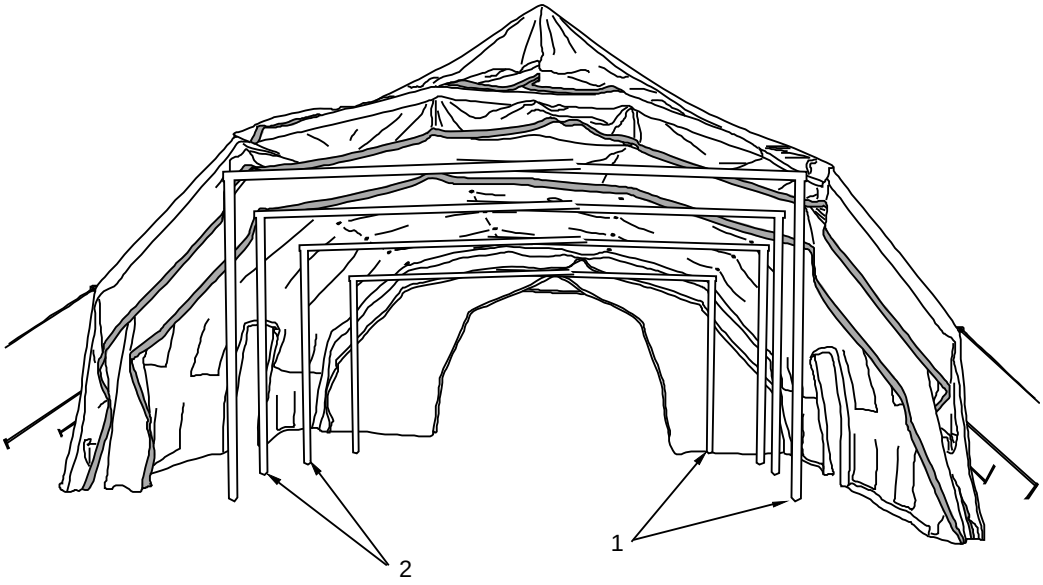


Figure 1. Additional Internal Load Supports.

To prevent damage to shelter due to heavy snow or freezing rain, the roof must be checked periodically for rain puddles or ice/snow accumulation. This can be accomplished by:

1. Shaking the exterior cover from the outside of the shelter.

2. Place a push pole between the interior and exterior covers and gently tapping the exterior cover until the shelter is cleared of the snow or ice accumulation.

3. During adverse weather conditions, routinely check and verify the security of the wind lines, stakes, and keepers.

END OF TASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

OPERATOR INSTRUCTIONS
J SHELTER
EMERGENCY PROCEDURES

INITIAL SETUP:

Personnel Required
Two

References
WP 0006,
WP 0026 to WP 0030

GENERAL

This work package covers emergency procedures for J SHELTER

Emergency Procedures for Stakes Pulled Out and Shelter Sitting on Internal Load Supports

1. Remove all items from shelter.
2. Insert bladder (see WP 0005).
3. Inflate bladder under internal load supports (see WP 0005).
4. Restake shelter (see WP 0005).
5. Release bladder and lower shelter (see WP 0005).

END OF TASK

Emergency Repair of Shelter Using Field Repair Kit

See WP 0012 to WP 0014 for detailed procedures.

END OF WORK PACKAGE

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO DHS SYSTEMS LLC AND IS INTENDED SOLELY FOR USE BY ITS CUSTOMERS. NO PORTION OF THIS DOCUMENT MAY BE REPRODUCED RELEASE TO A THIRD PARTY WITHOUT WRITTEN CONSENT OF DHS SYSTEMS LLC.

CHAPTER 3

CREW TROUBLESHOOTING PROCEDURES FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW TROUBLESHOOTING PROCEDURES
J SHELTER
CREW TROUBLESHOOTING INDEX

GENERAL

This WP contains a troubleshooting index of conditions/indications that may develop during maintenance or operation. Maintenance is limited to those failures that may be repaired at the crew level. The troubleshooting index identifies the condition/indication, which is followed by a column that identifies the work package and page(s) where crew level troubleshooting procedure(s) may be found (in the form of a inspection), followed by simple corrective actions which may be done by the crew. These inspections and corrective actions should be performed in the order listed. The index is provided to assist in the quick location of a problem. The manual cannot list all conditions/indications that may occur. If a condition/indication is encountered that is not listed or that cannot be corrected by the corrective actions provided, notify the supervisor.

TROUBLESHOOTING INDEX

The troubleshooting index assists the crew after a fault occurs. When a fault occurs, carefully inspect the equipment for fault indications to determine the best condition/indication to follow. The most important step in troubleshooting is recognizing the conditions/indications and combination of conditions/indications. Use the corrective action for a given condition/indication in the order of appearance. If the first repair attempt is unsuccessful, proceed to the next recommended corrective action to resolve the problem. If a fault is encountered that is not listed or that cannot be corrected by the corrective actions provided, notify the supervisor.

Except for the equipment in Table 1, refer to appropriate technical manual(s) for any remoted equipment. Table 1 is provided as a tool to maintain equipment in good operating condition and ready for its primary mission.

Table 1. Crew Troubleshooting Index.

ITEM	CONDITION/INDICATION	WP
	SHELTER (Mechanical)	
1	Shelter will not spread while on ground	0009-1
2	End caps will not spread while on ground	0009-1
3	Shelter will not erect	0009-2
4	Shelter will not stay erected	0009-2
5	End caps will not stay erect	0009-2
6	Shelter or end caps or shelter doors or connector leaks	0009-2
7	Keepers coming out while erected	0009-2
8	Shelter or end cap has unusual shape when erected	0009-3
9	Shelter binds when coming down	0009-3
10	End cap binds when coming down	0009-3
11	Shelter or end cap will not collapse completely when on ground	0009-3
12	Shelter or end cap shakes excessively	0009-4
13	Internal load support will not erect/lower	0009-4
14	Bladder does not inflate	0009-4
15	Blower does not operate properly	0009-4

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW TROUBLESHOOTING PROCEDURES
J SHELTER
SHELTER (MECHANICAL)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
Two

References
WP 0005, WP 0007, WP 0012, WP 0013, WP 0014, WP 0015

TROUBLESHOOTING PROCEDURES

This work package contains general information for troubleshooting of the J SHELTER by qualified crew level personnel. A qualified person is one who is familiar with this manual, the operation of the J SHELTER and the hazards involved in its operation and maintenance. This work package provides a systematic approach to locating and correcting malfunctions of the shelter. Each section is arranged according to the condition/indication of a problem. The corrective action items have been arranged in order of complexity, with simpler actions listed first. Note that troubleshooting causes and actions beyond the scope of qualified crew level personnel are not included in this WP. If a course of action does not present itself, contact your supervisor.

Table 1. Crew Troubleshooting – Shelter (Mechanical).

ITEM	CONDITION/INDICATION	POSSIBLE MALFUNCTION	CORRECTIVE ACTION
1	Shelter will not spread while on ground	Shelter fabric is binding.	Inspect all fabric and release from binding point.
		Tent wheel assemblies are catching on ground obstructions	Clear ground area as necessary.
		Hub broken.	Open hub and Inspect hub for damage. Replace hub (WP 0014).
		Strut broken.	Open hub and Inspect strut for damage. Repair/replace strut (WP 0013).
		Strut pair pulled out of hub	Replace hub (WP 0014)
2	End caps will not spread while on ground	End cap fabric is binding.	Inspect all fabric and release from binding point.
		Bottom hubs are catching on ground obstruction	Clear ground area as necessary.
		Broken hub.	Replace hub (WP 0014).
		Broken strut.	Repair/replace strut (WP 0013).
		Strut pair pulled out of hub.	Replace hub (WP 0014) or repair/replace strut (WP 0013).

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Table 1. Crew Troubleshooting – Shelter (Mechanical) – Continued.

ITEM	CONDITION/INDICATION	POSSIBLE MALFUNCTION	CORRECTIVE ACTION
3	Shelter will not erect	Bladder assembly will not inflate.	Inspect bladder assembly. If bladder is leaking repair (WP 0015).
		Shelter sides not secure to ground.	Inspect sides of shelter are not binding on ground. If practical, stake one side of shelter completely, then push/pull opposite side until fully erected. Stake second side.
4	Shelter will not stay erected	Shelter was not lifted to fully erect position	Verify that shelter has been lifted to fully erect position (WP 0005).
		Shelter was not properly staked.	Inspect shelter is properly staked in (WP 0005).
5	End caps will not stay erect	End caps have not lifted to fully erect position.	Use push poles to lift end caps at inner red tab lift points. Have additional personnel push in on outside of end caps.
		Shelter was not properly staked.	Stake end caps as described in set-up procedures (WP 0005).
6	Shelter or end caps or shelter doors or connectors leak	Hook and loop seams were not properly separated	Inspect that hook and loop seams are properly separated (WP 0005).
		Shelter/end cap torn/damaged.	Repair tear in fabric using Shelter repair kit (WP 0012). If tear is greater then 10 inches, replace liner or end cap (WP 0012).
7	Keepers coming out while erected	Keeper loose.	Tighten keeper using keeper tool from Shelter repair kit (WP 0014). If keeper will not tighten, Inspect hub and keeper. If keeper is unserviceable, replace keeper (WP 0014).
		Hub damaged/unserviceable	If hub is damaged/unserviceable, replace hub (WP 0014). Retighten all keepers before erecting shelter. Periodically Inspect keepers during extended operation.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Table 1. Crew Troubleshooting – Shelter (Mechanical) – Continued.

ITEM	CONDITION/INDICATION	POSSIBLE MALFUNCTION	CORRECTIVE ACTION
8	Shelter or end cap has unusual shape when erected	Broken hubs.	Replace hub (WP 0014).
		Broken strut.	Repair/replace strut (WP 0013).
9	Shelter binds when coming down	Hook and loop not separated.	Inspect that seams are properly separated (WP 0005).
		Obstructions.	Inspect that there are no obstructions are present.
		T-plate not separated.	Ensure T-plate has been separated from shelter.
		Ground stakes still installed.	Inspect that all ground stakes have been removed.
		Wind lines still attached	Inspect that all wind lines are removed.
		Hub broken/damaged	Inspect for broken/damaged hub. Replace hub (WP 0014).
		Strut broken/damaged	Inspect for broken/damaged strut. Repair/replace strut (WP 0013).
10	End cap binds when coming down	Obstructions.	Inspect that there are no obstructions are present.
		Hook and loop not separated	Inspect that hook-and-loop seams are properly separated (WP 0005).
		Door not open.	Inspect that doors are open.
		Ground stakes still installed.	Inspect that all ground stakes have been removed.
		Wind lines still attached	Inspect that all wind lines are removed.
		Hub broken/damaged	Inspect for broken hubs. Replace hub (WP 0014).
		Strut broken/damaged	Inspect for broken strut pairs. Repair/replace strut (WP 0013).
11	Shelter or end cap will not collapse completely when on ground	Obstructions.	Inspect that there are no obstructions present.
		Hub broken/damaged	Replace hub (WP 0014).
		Inspect for broken strut pairs	Repair/replace strut (WP 0013).

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Table 1. Crew Troubleshooting – Shelter (Mechanical) – Continued.

ITEM	CONDITION/INDICATION	POSSIBLE MALFUNCTION	CORRECTIVE ACTION
12	Shelter or end cap shakes excessively	Wind lines not installed/tight.	Inspect that wind lines properly installed. Inspect that wind lines are properly tightened.
		Shelter/end cap has not been staked down	Inspect that shelter or end cap has been staked down in accordance with set-up procedures (WP 0005).
13	Internal load support will not erect/lower	Pin jammed.	Inspect pin connections, ensure that pin is not jammed (WP 0005).
		Load support damaged	Inspect load support for physical damage. Ensure there are no bends, dents or other damage to support.
		Stakes not secure.	Inspect stakes are fully secured. If not, conduct Emergency Procedure for missing stakes (WP 0007).
14	Bladder does not inflate	Bad connection	Inspect connection between blower and bladder ensure there are no leaks or loose connections.
		Bad electrical connection	Inspect blower for proper electrical connection. Ensure that extension cord is no longer then 10 feet, due to amperage drop off at longer distances.
		Bladder damaged.	Inspect bladder for holes, cuts or other damage and repair using Shelter repair kit (WP 0015).
		Zipper broken/damaged.	Inspect zipper. If broken, repair zipper using Shelter repair kit (WP 0015).
15	Blower does not operate properly	Bad electrical connection.	Inspect blower for proper electrical connection and/or proper working order. Contact Maintainer.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CHAPTER 4

CREW MAINTENANCE INSTRUCTIONS FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
SERVICE UPON RECEIPT

INITIAL SETUP:

Personnel Required
Two

References
WP 0005, WP 0011

GENERAL

The following procedures are required to be performed by the crew in order to prepare the shelter for use.

SITING

To ensure minimal problems with set-up of J SHELTER and good operation of equipment being used inside J SHELTER, ensure area is:

- Dry.
- Level with a minimum clearing of 50 feet wide by 50 feet long for shelter,.
- Free of items (trees, buildings, or other structures) that would impede set-up of J SHELTER, shelter,.
- Free of items (e.g., towers, power lines, radar, trees, buildings,) that would cause interference with electronic equipment being used inside of shelter.

SHELTER REQUIREMENTS

The J SHELTER requires a footprint of 54.33 feet (16.56 meters) by 34.16 feet (10.41 meters).

SERVICE UPON RECEIPT

Inspect each, shelter and bladder) for damage incurred during shipment. If any damage is visible, notify supervisor. Report the damage on DD Form 361, Transportation Discrepancy Report. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with applicable service instructions.

Once all covers are removed, , shelter, and bagged components. Inspect all components for damage during shipment. Inspect for completeness. Ensure that no leaks are present. .

INSTALLATION INSTRUCTIONS

The J SHELTER requires some assembly depending on the mode of operation. To setup the J SHELTER in a fixed position, refer to WP 0005 of this TM for setup and installation procedures.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PRELIMINARY SERVICING OF EQUIPMENT

Perform all Crew PMCS for the J SHELTER as listed in WP 0011.

PRELIMINARY CHECKS AND ADJUSTMENT OF EQUIPMENT

There are no preliminary checks and adjustment of this equipment. Before placing the J SHELTER into service, ensure that all Crew PMCS (WP 0011) has been performed.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
PMCS

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

References
WP 0012 through WP 0015

Personnel Required
Two

Table 1. Crew Preventive Maintenance Checks and Services.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	Before	**MAIN SHELTER INSTALLATION** Shelter	1. Inspect covers (interior and exterior) for punctures, tears, separated seams, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0012). 2. Inspect shelter main frame and struts for breaks, cracks, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0013). 3. Inspect riser struts for breaks, cracks, or other visible damage. 4. Inspect all keepers for physical damage. Keepers should be snug and not easily turned. Replace if necessary using shelter repair kit(s) (WP 0014). 5. Inspect shelter floor for punctures, tears, separated seams, or other visible damage. 6. Inspect all visible hubs and hub extensions for breaks, cracks, or displacement. 7. Inspect all wind lines for cuts, fraying, or other visible damage. 8. Inspect all stakes and stake plates for physical damage. 9. Inspect cinch belts for cuts, fraying, or other visible damage. 10. Inspect plenum for rips tears, punctures or other physical damage.	Shelter will not stay erected. Exterior keepers missing.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Table 1. Crew Preventive Maintenance Checks and Services – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
2	Before	Bladder	1. Inspect bladder for punctures, tears, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0015).	Bladder will not inflate properly.
	Before	Bladder	2. Inspect three zippers for functionality. Zippers should not get caught, stuck or not open/close for any reason. Repair if necessary using shelter repair kit(s) (WP 0015).	Zippers not functioning properly.
3	Before	Blower	1. Inspect overall unit for damage.	Damage prevents blower from functioning properly.
			2. Inspect power cable and switch. Ensure that no physical damage (i.e., cuts, slices, burn marks, fraying, cracking) are present.	Damaged power cable.
			3. Inspect air supply hose ensure no damage (i.e., cracks, holes) is present.	Supply hose damaged causing hose to leak.
4	Before	Shelter, End Cap w/Frame	1. Inspect end cap covers (interior and exterior) for punctures, tears, separated seams, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0012).	
			2. Inspect all keepers for physical damage. Keepers should be snug and not easily turned. Replace if necessary using shelter repair kit(s) (WP 0014).	Exterior keepers missing.
			3. Inspect shelter floor for punctures, tears, separated seams, or other visible damage.	
			4. Inspect all wind lines for cuts, fraying, or other visible damage.	
			5. Inspect all stakes and stake plates for physical damage.	
			6. Inspect doors (interior and exterior) for punctures, tears, separated seams, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0014).	
			7. Inspect all visible struts for breaks, cracks, or other visible damage. Repair if necessary using shelter repair kit(s) (WP 0013).	End cap will not stay erected.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

Table 1. Crew Preventive Maintenance Checks and Services – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
4 (cont.)	Before	Shelter, End Cap w/Frame	8. Inspect all visible hubs and hub extensions for breaks, cracks, or displacement.	End cap will not stay erected.
			9. Inspect cinch belts for cuts, fraying, or other visible damage.	
5	Before	Internal Load Supports	1. Inspect internal load supports for bends, dents, cracks, or other physical damage. Repair if necessary using shelter repair kit(s) (WP 0015).	Damage present effecting functionality of support.
			2. Inspect pins ensure that pins operate properly and that no physical damage is present. Repair if necessary using shelter repair kit(s) (WP 0015).	Pins damaged beyond usability.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
SHELTER - COVER

GENERAL

This work package provides information on the repair, maintenance, removal and replacement of shelter covers for the J SHELTER. They consist of:

- Shelter/end cap cover repair
- Main shelter exterior cover removal/replacement
- Main shelter Interior cover removal/replacement
- End cap cover removal/ replacement

NOTE

Replacement items for shelter repair kits are listed in Expendable and Durable Items list or in the RPSTL.

Remove rings, bracelets, wrist watches, neck chains, and any other jewelry before working around J SHELTER. Jewelry can catch on equipment. Failure to observe this warning can result in serious injury or death.

Wear appropriate eye protection when performing maintenance. Metal pieces, fluids, dirt, grease, corrosion and escaping vapors and gasses present. Failure to comply may result in injury to personnel.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SHELTER – COVER REPAIR (USING SHELTER REPAIR KIT)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
One to four

Equipment Condition
Shelter is unpacked and spread out

NOTE

Items in the Shelter repair kit are intended to repair a hole or tear in a shelter cover 10 inch (25.4 cm) in size or less.

The following procedure can be used to repair the main shelter section, end caps and door.

REPAIR

1. Examine the damaged area of the interior or exterior covers (Figure 1, Item 1).

2. If necessary, remove only those keepers necessary to peel back the exterior or interior cover (Figure 1, Item 1) to reach the hole or tear (Figure 1, Item 2).

NOTE

When performing the following steps:
- Allow approximately 1/4 inch extra on all sides.
- If patching a small hole or tear, cut the patch into a circle.
- If the tear or hole is large cut the patch into an oval shape.

3. Choose matching color patch material (Figure 1, Item 3) from the repair kit. Using scissors cut enough patch material to cover the hole or tear.

4. Peel backing off of self adhering patch material (Figure 1, Item 3) and align with hole or tear (Figure 1, Item 2).

5. Press patch material (Figure 1, Item 3) firmly over hole or tear (Figure 1, Item 2), smoothing away any air bubbles. Patch will be secure immediately.

6. If necessary, replace cover and tighten all keepers as described in this WP.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

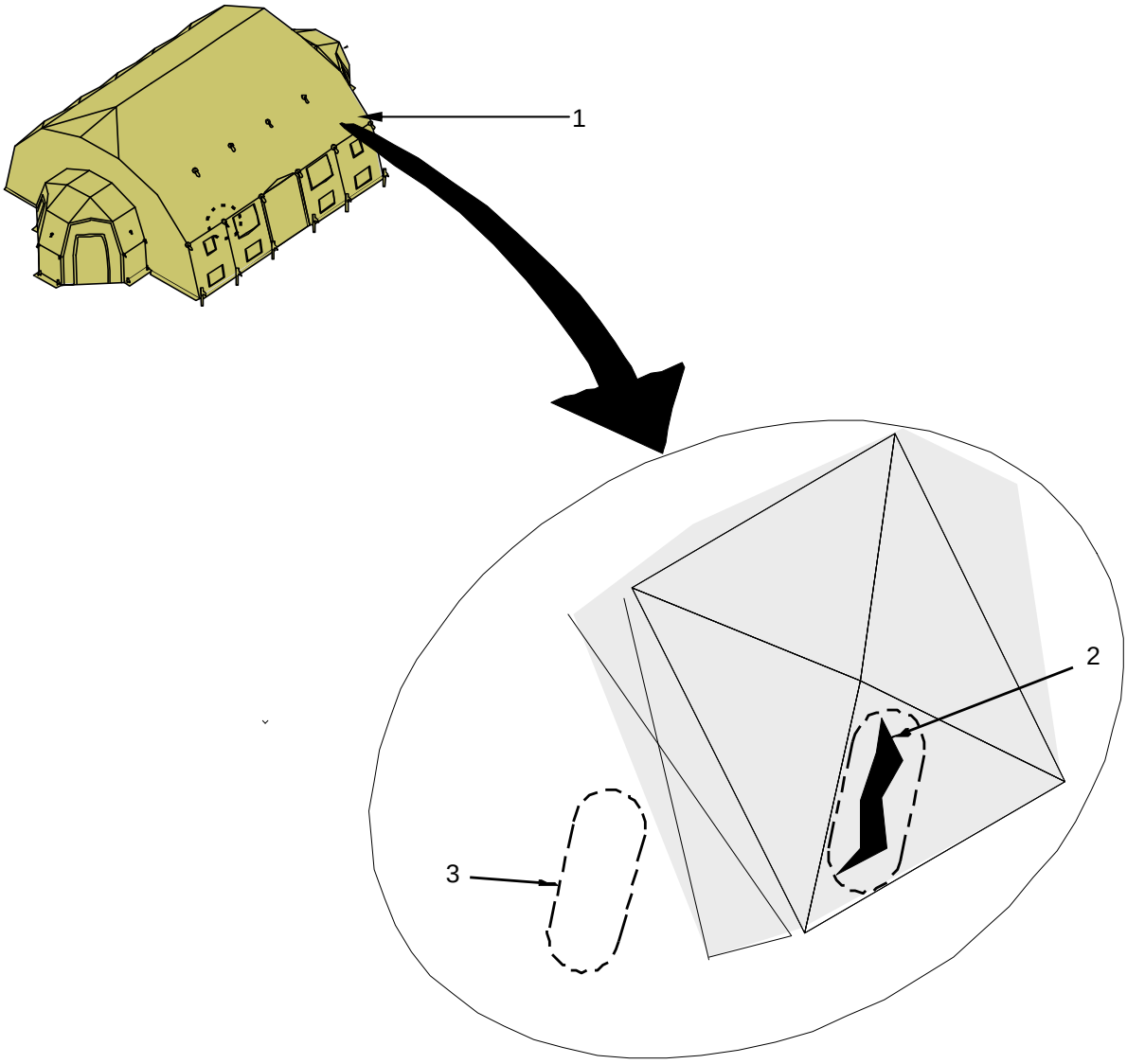


Figure 1. Repair of Shelter Cover.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAIN SHELTER EXTERIOR COVER REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
Four

Materials/Parts
Cover, exterior
Cover, interior

Equipment Condition
Shelter is unpacked and spread out

REMOVAL

1. Spread shelter out to full extension (see Figure 1).

CAUTION

Step only on strut pairs. Stepping on any other point could damage could cover, keeper or hub.

2. Remove nuts (Figure 2, Item 2) and washers (Figure 2, Items 3 and 6) from all wind line eye bolts (Figure 2, Item 7).

NOTE

When performing the following step, remember to keep track of which keepers went into which holes. Looped keepers must be returned to proper location(s).

When performing the following step, inspect all keepers for damage (stripped threads, broken or frayed loop.

3. Using spanner wrench, remove and retain all keepers (Figure 2, Item 5).

4. Roll main shelter exterior cover (Figure 2, Item 1) off of struts (Figure 2, Item 8).

END OF TASK

REPLACEMENT

CAUTION

Step only on strut pairs. Stepping on any other point could damage cover, keeper or hub.

1. Spread shelter frame out completely.

2. Using risers for alignment, roll main shelter exterior cover (Figure 2, Item 1) over shelter frame to center.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPLACEMENT - Continued

CAUTION

NEVER use a thread-locking additive on the keepers. This will damage the threads and prevent the keeper from being removed at a later time for repairs.

NOTE

Refer to Figure 3 for location of keepers and windlines.

Place the keepers back into their original positions to ensure the proper placement of the looped keepers.

Keepers will screw in easily. If keeper will not screw in by hand, check to make sure the keeper is straight, and checks the threads in the hub to insure they are not damaged. If damaged replace with a new hub.

3. Working from center to side, unroll cover (Figure 2, Item 1), inserting keepers (Figure 2, Item 5) into hubs (Figure 2, Item 4).

4. Repeat step 3 for opposite side.

5. Using spanner wrench, tighten all keepers (Figure 2, Item 5).

6. Install nuts (Figure 2, Item 2) and washers (Figure 2, Items 3 and 6) and wind line eye bolts (Figure 2, Item 7).

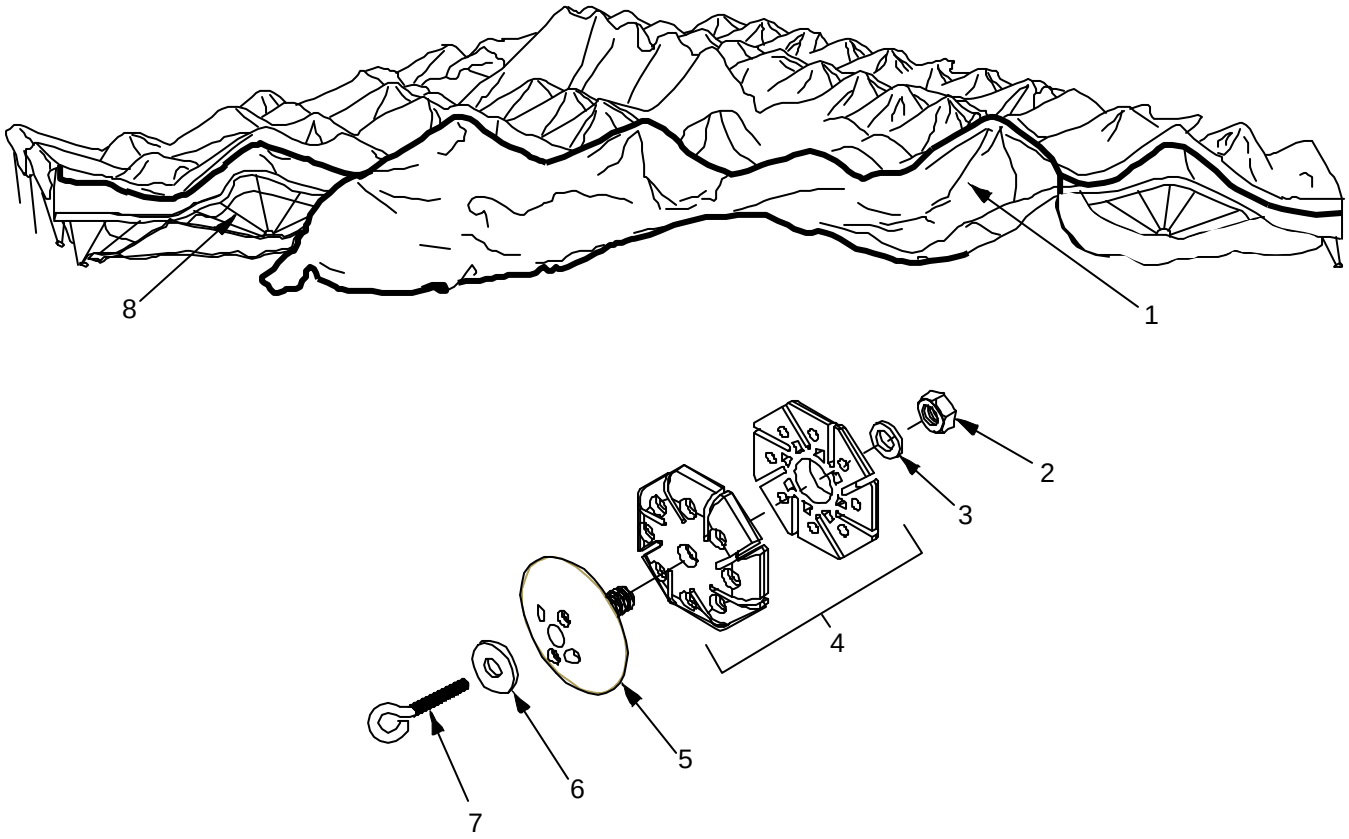


Figure 2. Main Shelter Exterior Cover Removal/Replacement.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

NOTE

The following illustration shows the location of keepers and windlines on the shelter.

W = Windline K= Keeper

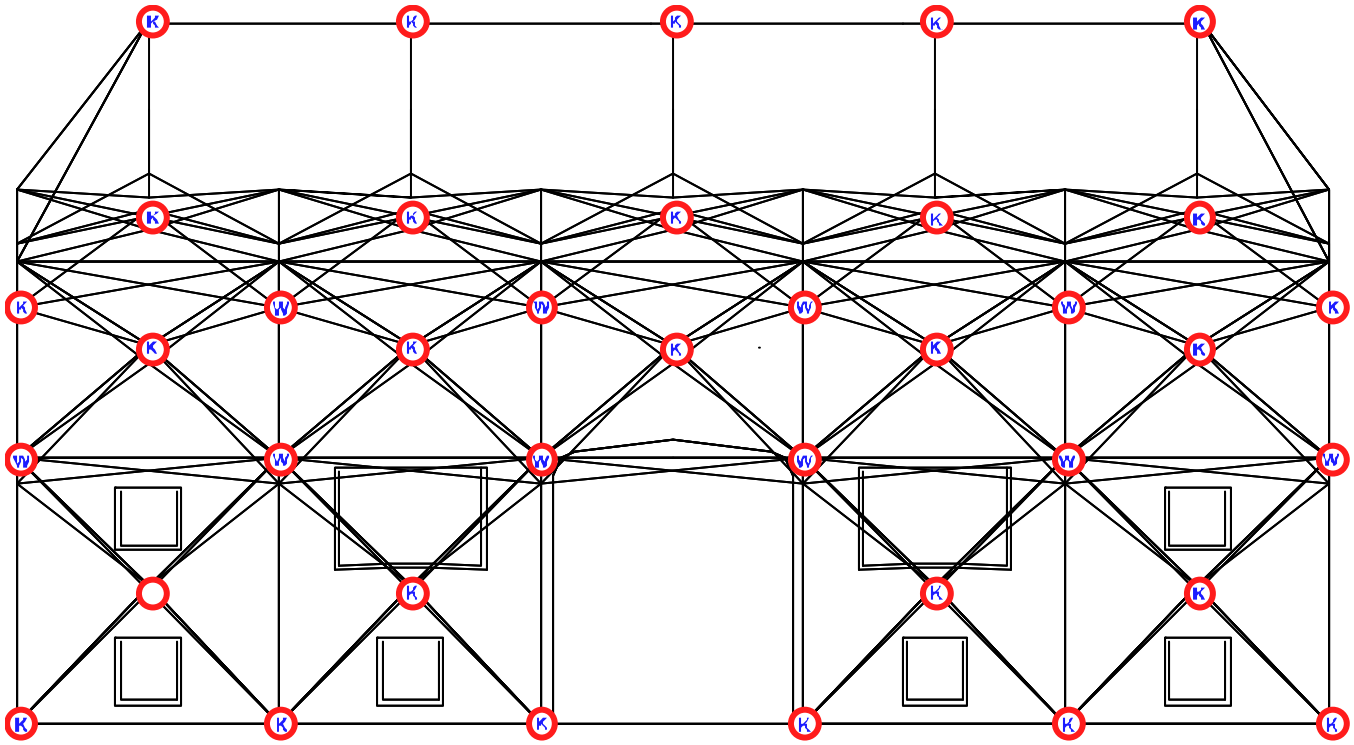


Figure 3. Main Shelter Keeper and Wind Line Locations.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAIN SHELTER INTERIOR COVER REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
Four

Materials/Parts
Cover, interior

Equipment Condition
Shelter is unpacked and spread out

REMOVAL

1. If necessary, setup shelter. Do not attach T-plates or end caps.

NOTE

When performing the following step, remember to keep track of which keepers went into which holes. Looped keepers must be returned to proper location(s).

When performing the following step, inspect all keepers for damage (stripped threads, broken or frayed loop.

2. Starting on one side of shelter; using spanner wrench, remove all keepers (Figure 4, Item 2) in a row across the bottom of the shelter.

CAUTION

When performing the following step, remove only one staking bracket assembly at a time. Failure to do so will weaken the structural integrity of the shelter and could cause injury to personnel or damage to the shelter.

3. Remove six screws (Figure 4, Item 4) and nuts (Figure 4, Item 7) mounting staking bracket (Figure 4, Item 3) to corner hubs (Figure 4, Item 6), one hub at a time to remove the interior cover. Replace staking bracket (Figure 4, Item 3) before continuing to next hub.

4. Move up to next row of keepers (Figure 4, Item 2) and remove all keepers (Figure 4, Item 2) in row. For floating keepers disconnect bungi cords, then unscrew nut from back of floating keeper.

5. Continue to remove the keepers (Figure 4, Item 2) until the top center row is reached. Do not remove the center row at this time.

6. Repeat procedure 2 through 5 for the opposite side.

7. Starting on the end of the shelter (Figure 4, Item 1) for the top center row, remove the keepers (Figure 4, Item 2), one at a time while working back to the other end of the shelter (Figure 4, Item 1) to drop the interior cover (Figure 4, Item 5) .

8. Fold the interior cover and remove from the shelter (Figure 4, Item 1).

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPLACEMENT

1. Position main shelter interior cover (Figure 4, Item 5) along side wall.

CAUTION

When performing the following step, remove only one staking bracket at a time. Failure to do so will weaken the structural integrity of the shelter and could cause injury to personnel or damage to the shelter.

2. Remove and retain six screws (Figure 4, Item 4) and nuts (Figure 4, Item 7) attaching staking bracket (Figure 4, Item 3) to the first corner hub and mount corner of interior cover (Figure 4, Item 5).

3. Install staking bracket (Figure 4, Item 3) with six screws (Figure 4, Item 4) and nuts (Figure 4, Item 7). Work across bottom of frame. Insert keeper through hole in fabric and insert into hub. Tighten down keeper (Figure 4, Item 2) using spanner wrench.

4. Lift main shelter interior cover (Figure 4, Item 5) into position and repeat process along subsequent rows. Use care to insert proper keepers into each location. Attach floating keepers to fabric by inserting through hole and attaching nut to end. Attach bungi cord to floating keepers.

5. Continue process, one row at a time until all rows of main shelter interior cover (Figure 4, Item 5) are attached.

6. Check all keepers (Figure 4, Item 2) to ensure they are tight using spanner wrench.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

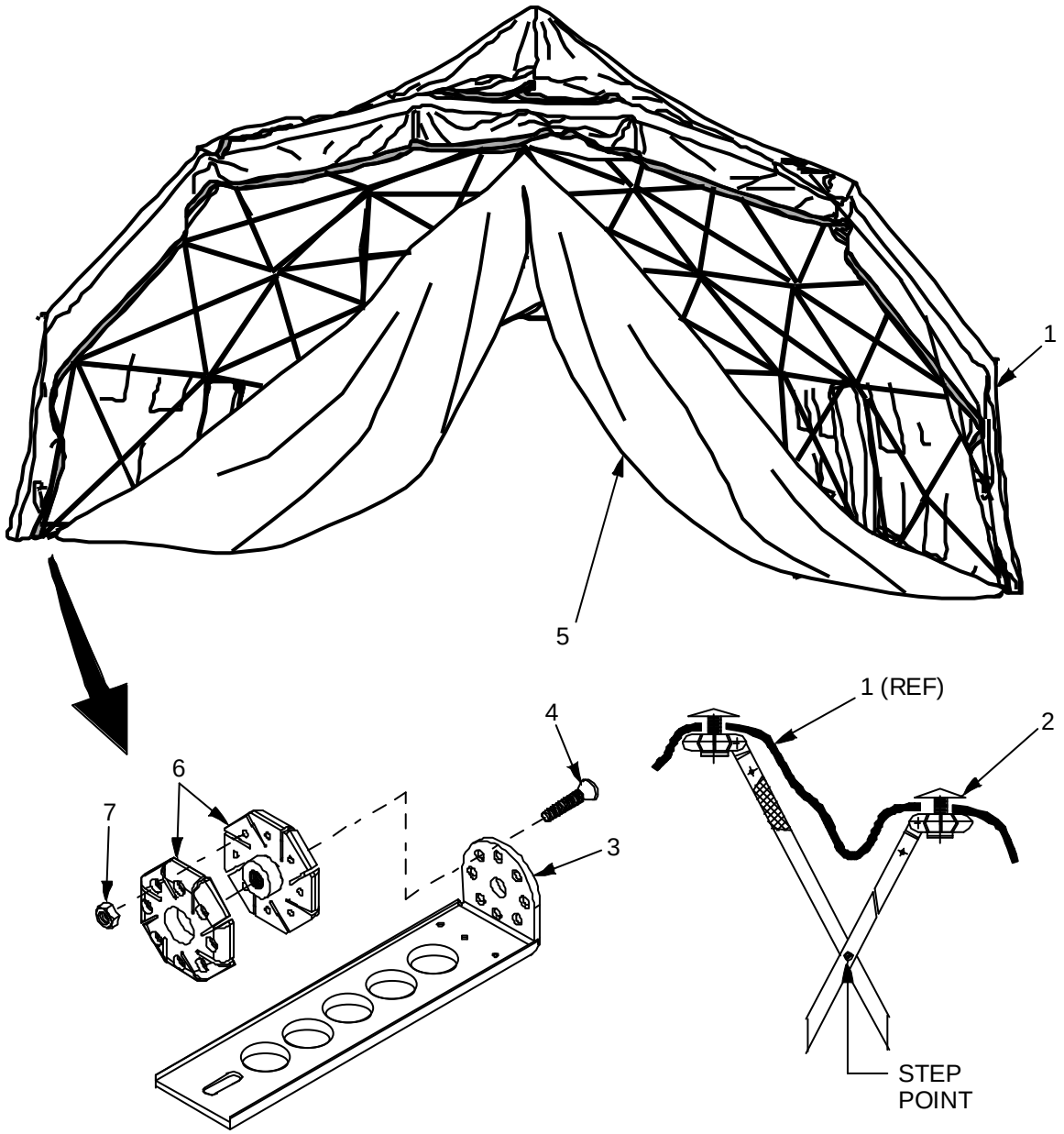


Figure 4. Main Shelter Interior Cover Removal/Replacement.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

END CAP COVER REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
Four

Materials/Parts
Cover

Equipment Condition
End cap is unpacked/removed from main shelter and spread out

END CAP COVER

REMOVAL

1. Spread end cap (Figure 5, Item 1) out to full extension so that end cap cover (Figure 5, Item 2) being replaced is face up.

NOTE

When performing the following step, remember to keep track of which keepers went into which holes. Looped keepers must be returned to proper location(s).

When performing the following step, inspect all keepers for damage (stripped threads, broken or frayed loop.

2. Using spanner wrench, remove and retain all keepers (Figure 5, Item 3) from hubs (Figure 5, Item 4).

3. Roll cover (Figure 5, Item 2) off of struts (Figure 5, Item 5).

NOTE

If removing both interior and exterior covers, continue with step 4.

4. Compress frame.

5. Flip end cap (Figure 5, Item 1) over. Repeat steps 1 through 3.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPLACEMENT

1. Spread end cap frame (Figure 5, Item 1) out completely.

2. Using door sections for alignment, spread cover (Figure 5, Item 2) over frame.

CAUTION

NEVER use a thread-locking additive on the keepers. This will damage the threads and prevent the keeper from being removed at a later time for repairs.

NOTE

Place the keepers back into their original positions to ensure the proper placement of the looped keepers.

Keepers will screw in easily. If keeper will not screw in by hand, check to make sure the keeper is straight, and checks the threads in the hub to insure they are not damaged. If damaged replace with a new hub.

3. Install keepers (Figure 5, Item 3) and attach to hubs (Figure 5, Item 4).

4. Repeat until all keepers (Figure 5, Item 3) are installed being mindful of proper locations of looped keepers (Figure 5, Item 3).

5. Compress the end cap (Figure 5, Item 1) 4/5th of the way.

6. Using spanner wrench, tighten all keepers (Figure 5, Item 3).

NOTE

If replacing both interior and exterior covers, perform step 7.

7. Compress the frame, flip the end cap over and repeat steps 1 through 6.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

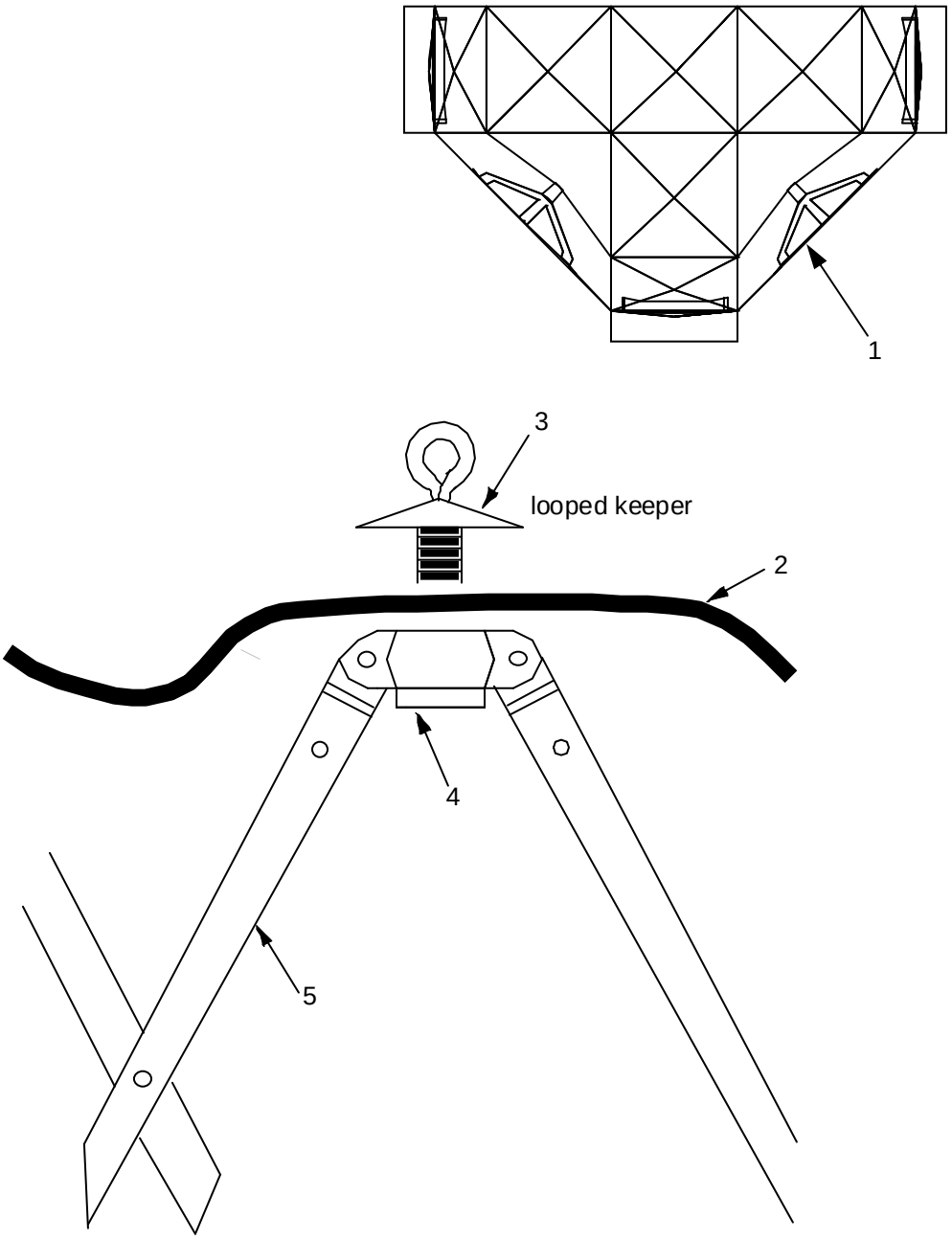


Figure 5. End Cap Cover Removal/Replacement.

END OF TASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
SHELTER – STRUT

GENERAL

This work package provides information needed by the Crew when performing the following maintenance procedures on the J SHELTER. They consist of:

- Shelter – Strut repair (using shelter repair kit)
- Shelter – Main shelter strut removal/replacement
- Shelter – End cap strut removal/replacement

WARNING

Remove rings, bracelets, wrist watches, neck chains, and any other jewelry before working around J SHELTER. Jewelry can catch on equipment and cause injury Failure to observe this warning can result in serious injury or death.

Wear appropriate eye protection when performing maintenance. Metal pieces, fluids, dirt, grease, corrosion and escaping vapors and gasses present. Failure to comply may result in injury to personnel.

NOTE

Replacement items for shelter repair kits are listed in Expendable and Durable list or in the RPSTL.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SHELTER – STRUT REPAIR (USING SHELTER REPAIR KIT)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
One to four

Materials/Parts
Duct tape (WP 0031, Items 3 or 4)

Equipment Condition
Shelter is unpacked and spread out

NOTE

The following procedure can be used to repair struts for both the main shelter section and end caps.

If fractured strut(s) is found during shelter inspection, remove only the exterior cover required to gain access to damaged strut.

REPAIR

1. Remove appropriate keepers if necessary, as described in this WP.
2. Peel back cover to gain access to damaged strut (Figure 1, Item 1).
3. Using hack saw, trim off 1/2 inch (1.27 cm) from each end of damaged strut (Figure 1, Item 1).
4. Retrieve repair sleeve (Figure 1, Item 2) from shelter repair kit.
5. Slide the repair sleeve (Figure 1, Item 2) over damaged strut (Figure 1, Item 1), keeping damaged strut (Figure 1, Item 1) centered in repair sleeve (Figure 1, Item 2).

NOTE

Tape one end ONLY of the repair sleeve (Figure 1, Item 2) with the duct tape (Figure 1, Item 3). This will allow broken strut (Figure 1, Item 1) to telescope within the repair sleeve (Figure 1, Item 2) and maintain its critical length.

6. Wrap tape around end of broken strut (Figure 1, Item 1) that is closest to the center hinge (Figure 1, Item 4). This will ensure repair sleeve (Figure 1, Item 2) does not slide into and bind the hinge.
7. Replace shelter cover.
8. Tighten all keepers as described in this WP.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

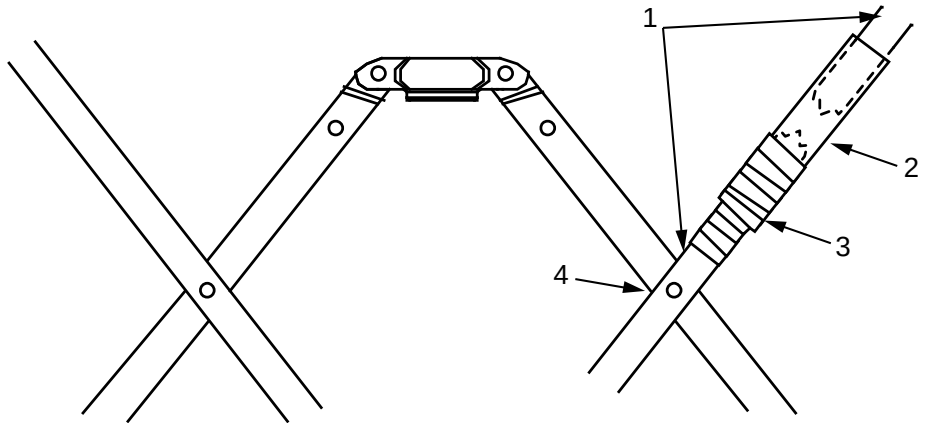


Figure 1. Field Repair of Shelter Strut.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAIN SHELTER STRUT REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

References
WP 0006

Materials/Parts
Strut

Equipment Condition
Shelter is unpacked and spread out

Personnel Required
Four

NOTE

Strut replacement should not be attempted while shelter is erected. If strut damage requires immediate repair, follow strut field repair procedures in this WP.

Struts are color coded. The replacement strut must be orientated the same way as the original strut.

REMOVAL

1. Identify broken strut(s) (Figure 2, Item 2) and associated hub assemblies (Figure 2, Item 5) on shelter frame (Figure 2, Item 3).

CAUTION

Step only on strut pairs. Stepping on any other point could damage cover, keeper or hub.

NOTE

Work on one strut pair at a time to prevent confusion.

2. Move across exterior of shelter to hub assemblies (Figure 2, Item 5) affected by broken strut (Figure 2, Item 2). Using spanner wrench, remove keepers (Figure 2, Item 6) holding cover (Figure 2, Item 1) to affected hub assemblies (Figure 2, Item 5).

3. Move between hub sections under the interior cover and remove keepers (Figure 2, Item 6) attached to affected hub assemblies (Figure 2, Item 5).

4. Move inside shelter frame to access hub assemblies (Figure 2, Item 5) connected to struts (Figure 2, Item 2). If necessary remove bungi cords connecting floating hubs to strut assembly to allow for freer access.

WARNING

Only open one hub assembly at a time. Struts are under pressure; keep clear of struts when removing from hub assembly in case of backlash.

5. Remove eight screws (Figure 2, Item 4) and separate hub assembly (Figure 2, Item 5). Remove broken strut (Figure 2, Item 2) from hub assembly (Figure 2, Item 5).

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPLACEMENT

CAUTION

Placing the strut in backwards can prevent the shelter from erecting or cause other struts to break.

NOTE

Place new strut alongside old strut and verify the strut being replaced is correct type and color.

Depending on the location of the strut assembly the strut may need to be bent into shape. If available a heavy duty ratchet strap can be used to hold the strut into position while the hub is being assembled.

1. Position strut (Figure 2, Item 2) into hub assembly (Figure 2, Item 5) by inserting end hinge rod of strut into hub base (Figure 2, Item 5B).

NOTE

If multiple struts are in hub, ensure that all struts are securely seated.

2. Install top of hub (Figure 2, Item 5A) and secure with eight screws (Figure 2, Item 4).
3. Repeat procedure beginning with step 5 of removal procedure until all damaged struts (Figure 2, Item 2) are replaced.
4. Attach any bungee cords that were disconnected to gain access to strut assembly.
5. Move underneath interior cover between hub assemblies (Figure 2, Item 5) and insert keeper (Figure 2, Item 6) through fabric into hub assembly (Figure 2, Item 5) and tighten down with spanner wrench.
6. Move across exterior cover (Figure 2, Item 1) by stepping on strut assembly pairs, insert exterior keepers (Figure 2, Item 6) through holes in exterior cover into corresponding hub assemblies (Figure 2, Item 5).
7. Verify proper assembly, setup shelter as described in WP 0005.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

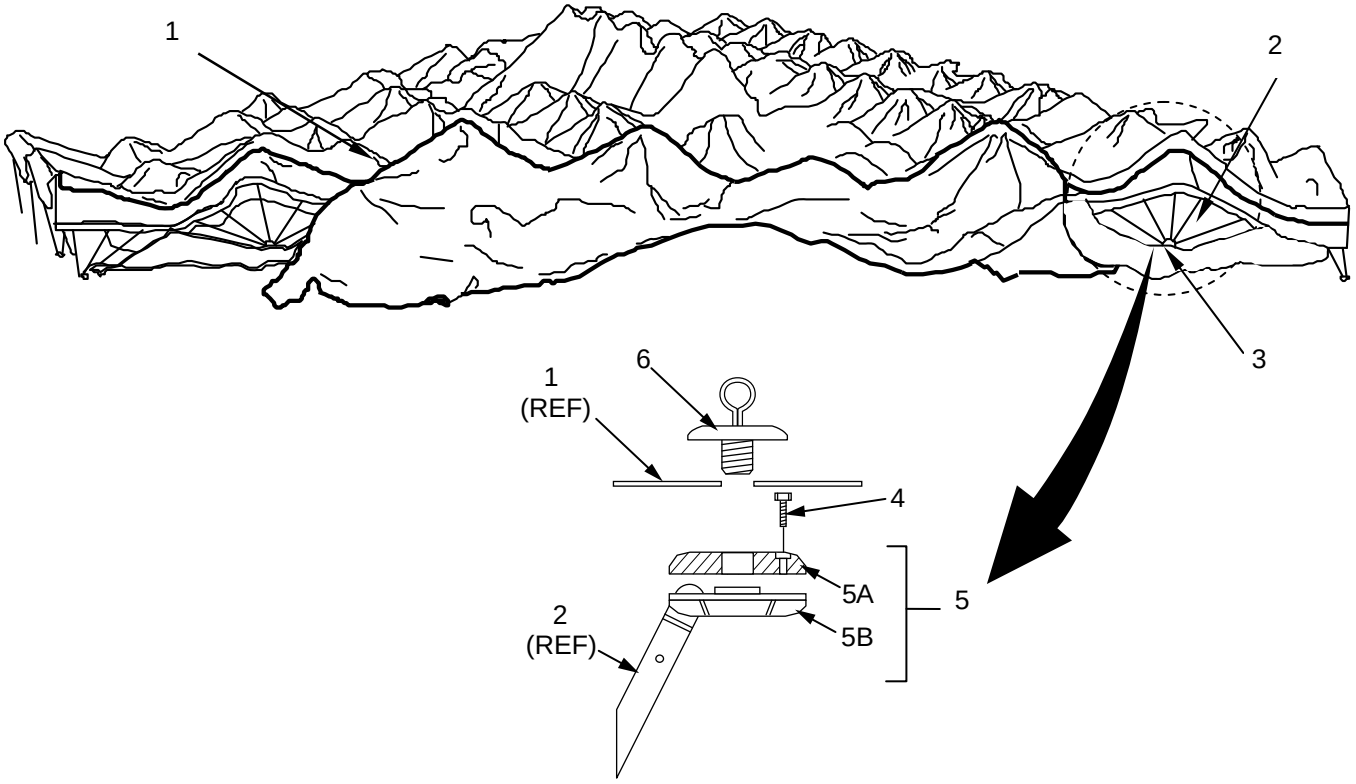


Figure 2. Main Shelter Struts Removal/Replacement.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

END CAP STRUT REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

References
WP 0005, WP 0012

Materials/Parts
Strut

Equipment Condition
Shelter is unpacked and spread out

Personnel Required
Two

NOTE

Strut replacement should not be attempted while shelter is erected. If strut damage requires immediate repair, follow strut field repair procedures listed in this WP.

Struts are color coded. The replacement strut must be orientated the same way as the original strut.

REMOVAL

1. Identify broken strut(s) (Figure 3, Item 2) and associated hub assemblies (Figure 3, Item 5).
2. Contract end cap(s) until tension on strut(s) (Figure 3, Item 2) are reduced.
3. Using spanner wrench, remove keepers (Figure 3, Item 3) holding exterior cover (Figure 3, Item 1) to the affected hub assemblies (Figure 3, Item 5).

WARNING

Only open one hub assembly at a time. Struts are under pressure; keep clear of struts when removing from hub assembly in case of backlash.

NOTE

When performing the following step, be observant of strut positions in hub.

4. Remove eight screws (Figure 3, Item 4) and separate hub (Figure 3, Item 5). Remove broken strut (Figure 3, Item 2).

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPLACEMENT

CAUTION

Placing the strut in backwards can prevent the shelter from erecting or cause other struts to break.

NOTE

Place new strut alongside old strut and verify the strut being replaced is correct type and color.

Depending on the location of the strut assembly the strut may need to be bent into shape. If available a heavy duty ratchet strap can be used to hold the strut into position while the hub is being assembled.

1. Position strut (Figure 3, Item 2) into hub (Figure 3, Item 5) by inserting end hinge rod of strut (Figure 3, Item 2) into hub base (Figure 3, Item 5A).

NOTE

If multiple struts are in hub, ensure that all struts are securely seated.

2. Install top of hub (Figure 3, Item 5A) and secure with eight screws (Figure 3, Item 4).
3. Repeat procedure beginning with step 4 of removal procedure for other end of strut pair.
4. Install exterior cover (Figure 3, Item 1) as described in this WP.
5. Compress end cap assembly and flip end cap assembly over so that interior end cap is facing up.
6. Spread end cap and repeat steps for interior end cap.
7. Remove broken strut pair from shelter.
8. Install interior cover as described in WP 0012.
9. Compress end cap assembly and flip end cap assembly over so that exterior cover is facing up.
10. Verify proper assembly, setup shelter as described in WP 0005.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

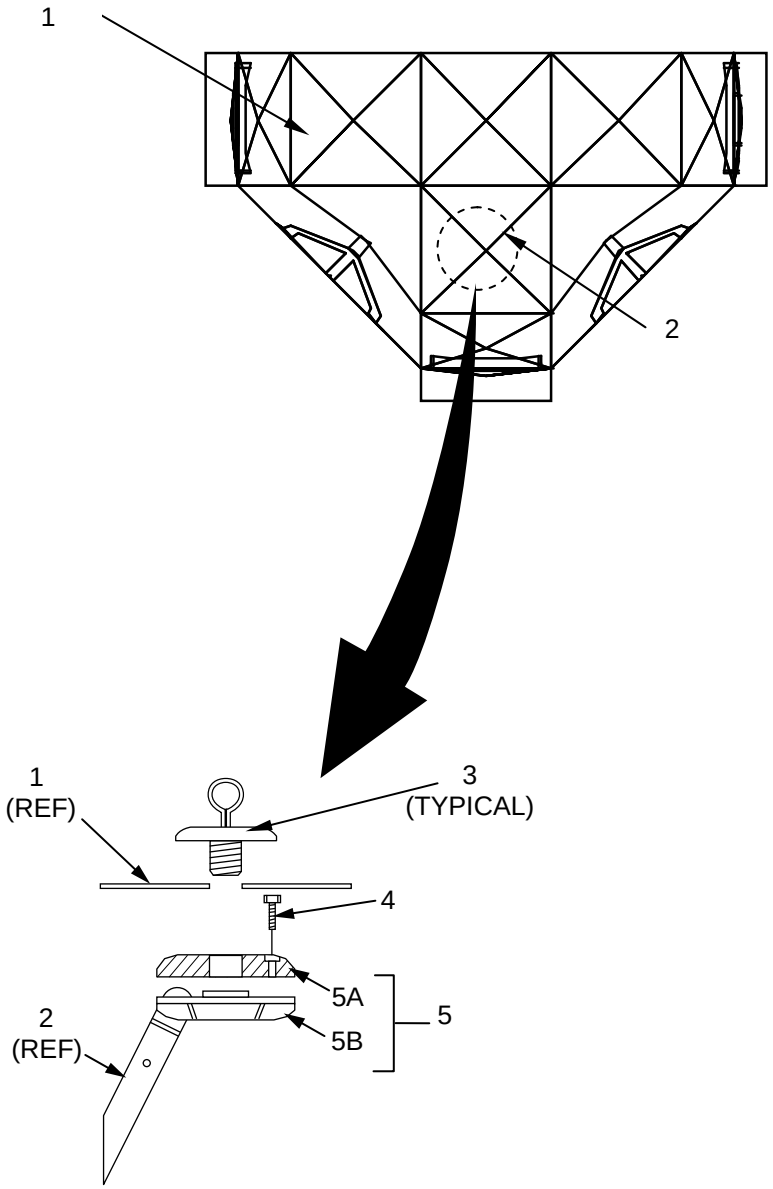


Figure 3. End Cap Strut Removal/Replacement.

END OF TASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
SHELTER – HUB, KEEPER STAKING BRACKET

GENERAL

This work package provides information needed by the Crew when performing the following maintenance procedures on the J SHELTER shelter. They consist of:

- Shelter – Keeper removal/replacement
- Shelter – Main Staking bracket removal/replacement
- Shelter – Hub removal/replacement

WARNING

Remove rings, bracelets, wrist watches, neck chains, and any other jewelry before working around J SHELTER. Jewelry can catch on equipment and cause injury Failure to observe this warning can result in serious injury or death.

Wear appropriate eye protection when performing maintenance. Metal pieces, fluids, dirt, grease, corrosion and escaping vapors and gasses present. Failure to comply may result in injury to personnel.

NOTE

Replacement items for tent repair kits are listed in Expendable and Durable list (WP 0031), or in the RPSTL (Chpt 6) of this TM.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SHELTER – KEEPER REMOVAL/REPLACEMENT (USING SHELTER REPAIR KIT)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
One

Materials/Parts
Keeper

Equipment Condition
Shelter is unpacked and spread out

NOTE

The following procedure can be used to replace keepers on both the main shelter section and end caps.

REMOVAL

1. Identify damaged keeper (Figure 1, Items 1 or 2).

2. Using spanner wrench, loosen keeper (Figure 1, Items 1 and 2) and remove from hub (Figure 1, Item 4).

END OF TASK

REPLACEMENT

1. Retrieve a replacement keeper (Figure 1, Items 1 and 2) from the shelter repair kit. Inspect to ensure O-ring is present around keeper base and that O-ring is not damaged or deteriorated in any way.

CAUTION

NEVER use thread-locking additive on keepers (Figure 1, Items 1 and 2). This will damage the threads and prevent keeper (Figure 1, Items 1 and 2) from being removed.

NOTE

Inspect threads of hub (Figure 1, Item 4) and keeper (Figure 1, Items 1 and 2) to insure they are not damaged. If damaged, contact Service Maintenance to replace hub (Figure 1, Item 4). Keeper (Figure 1, Items 1 and 2) should screw in easily. If keeper (Figure 1, Items 1 and 2) will not screw in by hand, check to make sure that keeper (Figure 1, Items 1 and 2) is straight and that cross-threading did not occur.

When performing the following step, ensure all sewn seams of shelter (Figure 1, Items 3) are aligned. Fabric reinforced circles around keepers should not be twisted.

2. Screw new keeper (Figure 1, Items 1 and 2) through shelter (Figure 1, Item 3) into the hub (Figure 1, Item 4) by hand until snug.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CAUTION

When performing the following step, do not over tighten. This could damage the threads and prevent the keeper from being removed.

3. Use the spanner wrench, tighten one-quarter turn past hand tight.

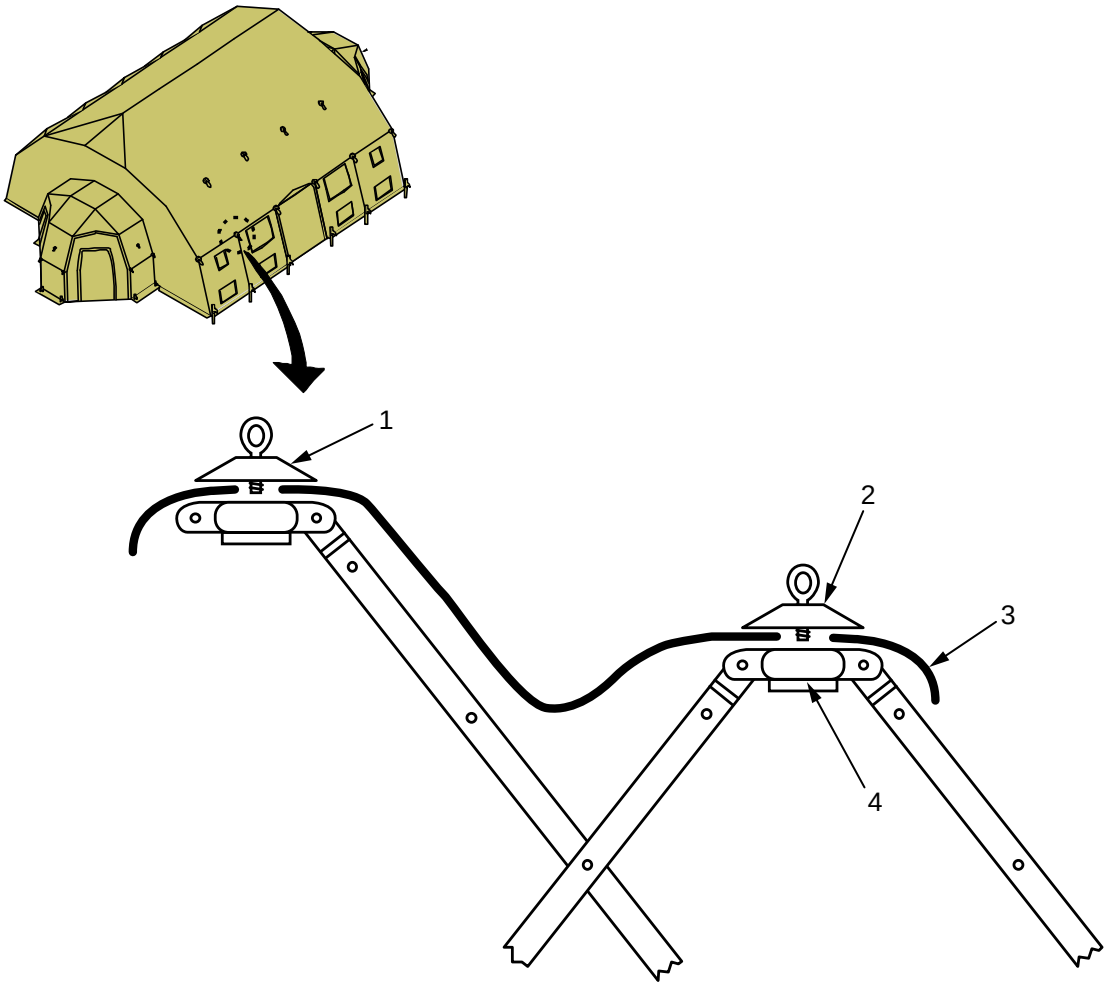


Figure 1. Shelter Keepers Removal/Replacement.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

SHELTER – HUB REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

References
WP 0005

Materials/Parts
Hub

Equipment Condition
Shelter is unpacked and spread out

Personnel Required
One

NOTE

The following procedures apply to main shelter sections and end caps.

When performing the following step, remember to keep track of which keepers went into which holes. Looped keepers must be returned to proper location(s).

When performing the following step, inspect all keepers for damage (stripped threads, broken or frayed loop, remember to keep track of which keepers went into which holes. Looped keepers must be returned to proper location(s).

Work on one hub assembly at a time to prevent struts from pulling out of additional hubs.

To move around on shelter, step on strut pairs only. Do not step on fabric between strut pairs.

REMOVAL

1. For exterior hub assemblies (Figure 2, Items 6 or 10) move across exterior of shelter to broken hub assembly (Figure 2, Items 6 or 10). Using spanner wrench, remove keepers (Figure 2, Items 4 or 8) holding cover to the affected hub assembly (Figure 2, Items 6 or 10).

2. For interior hub assemblies (Figure 2, Items 6 or 10) move between hub sections under the inner cover (Figure 2, Item 1) and remove the keepers (Figure 2, Items 4 or 8) attached to the affected hub assemblies (Figure 2, Items 6 or 10).

3. Move inside shelter frame (Figure 2, Item 3) to access hub assembly (Figure 2, Items 6 or 10) connected to struts (Figure 2, Item 2). If necessary remove bungi cords (Figure 2, Item 7) connecting floating hubs (Figure 6, Item 10) to strut assembly (Figure 2, Item 2) to allow for freer access.

CAUTION

Only open 1 hub assembly (Figure 2, Items 6 or 10) at a time. Struts (Figure 2, Item 2) are under pressure; keep clear of struts (Figure 2, Item 2) when removing from hub assembly (Figure 2, Items 6 or 10) in case of backlash.

4. Remove eight screws (Figure 2, Item 5 or 9) and separate hub assembly (Figure 2, Items 6 or 10). Remove broken strut (Figure 2, Item 2) from hub assembly (Figure 2, Items 6 or 10).

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REMOVAL – Continued

NOTE

Depending on the location of the strut assembly the strut (Figure 2, Item 2) may need to be bent into shape. If available a heavy duty ratchet strap can be used to hold the strut into position while the hub is being assembled.

When performing the following step, be observant of strut positions in hub (Figure 2, Items 6 or 10).

5. Remove and retain top of hub (Figure 2, Items 6A or 10A).

6. Remove strut(s) (Figure 2, Item 2) from the damaged hub assembly (Figure 2, Items 6 or 10).

END OF TASK

REPLACEMENT

1 Position strut(s) (Figure 2, Item 2) and install into hub assembly (Figure 2, Items 6 or 10).

2. Insert end hinge rods of strut(s) (Figure 2, Item 2) into hub base (Figure 2, Items 6B or 10B).

NOTE

Multiple strut(s) (Figure 2, Item 2) are in hub assembly (Figure 2, Items 6 or 10). Ensure that all strut(s) (Figure 2, Item 2) are securely seated.

3. Install top of hub (Figure 2, Items 6A or 10A) and secure with eight screws (Figure 2, Items 5 or 9).

4. Attach any bungi cords that were disconnected to gain access to strut assembly.

5 For interior cover (Figure 2, Item 1) move underneath inner cover (Figure 2, Item 1) between hub assemblies (Figure 2, Items 6 or 10) and insert keeper (Figure 2, Items 4 or 8) through fabric into hub assembly (Figure 2, Items 6 or 10) and tighten down with spanner wrench.

6. For exterior cover move across exterior cover by stepping on strut assembly pairs (for main shelter section only) and insert exterior keepers (Figure 2, Items 4 or 8) through holes in exterior fabric into corresponding hub assemblies (Figure 2, Items 6 or 10).

7. Verify proper assembly, erect shelter as described in WP 0005.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

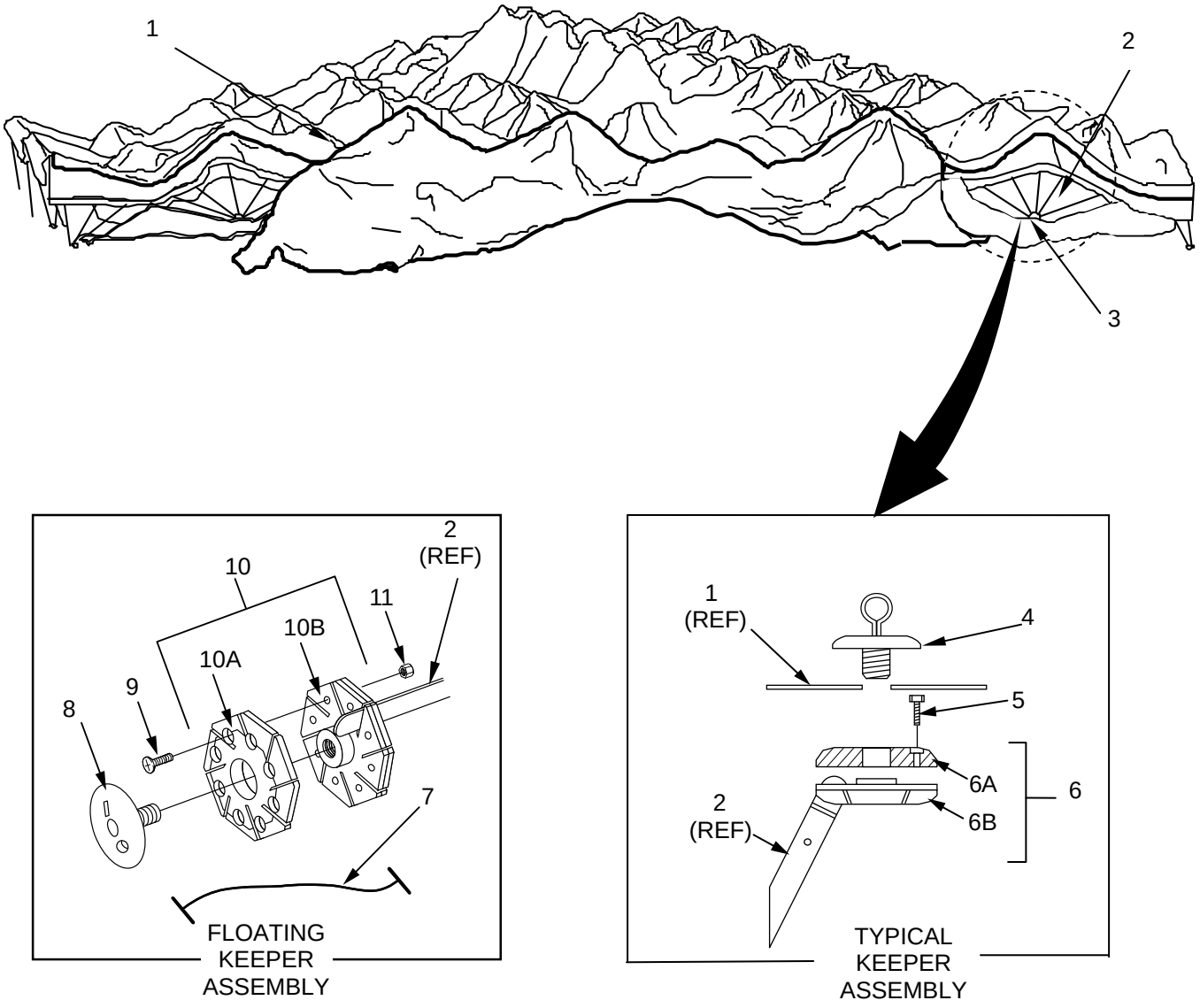


Figure 2. Shelter Hub Removal/Replacement.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAIN STAKING BRACKET REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Personnel Required
Four

Materials/Parts
Main staking bracket

REMOVAL

1. Identify broken/damaged main staking bracket (Figure 3, Item 2).
2. Remove keeper (Figure 3, Item 5) from hub (Figure 3, Item 3) using spanner wrench.
3. Remove and retain eight screws (Figure 3, Item 1), and nuts (Figure 3, Item 4) securing main staking bracket to hub (Figure 3, Item 3).

NOTE

When performing the following step struts are under pressure. Do not allow the hub to separate.

4. Remove main staking bracket (Figure 3, Item 2) from hub (Figure 3, Item 3).

END OF TASK

REPLACEMENT

NOTE

Prior to performing the following step inspect all pieces to ensure completeness and serviceability.

1. Assemble main staking bracket (Figure 3, Item 2) and hub (Figure 3, Item 3). Secure using eight screws (Figure 3, Item 1), and nuts (Figure 3, Item 4).

2. Insert keeper (Figure 3, Item 5) into hub (Figure 3, Item 3) and tighten using spanner wrench.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

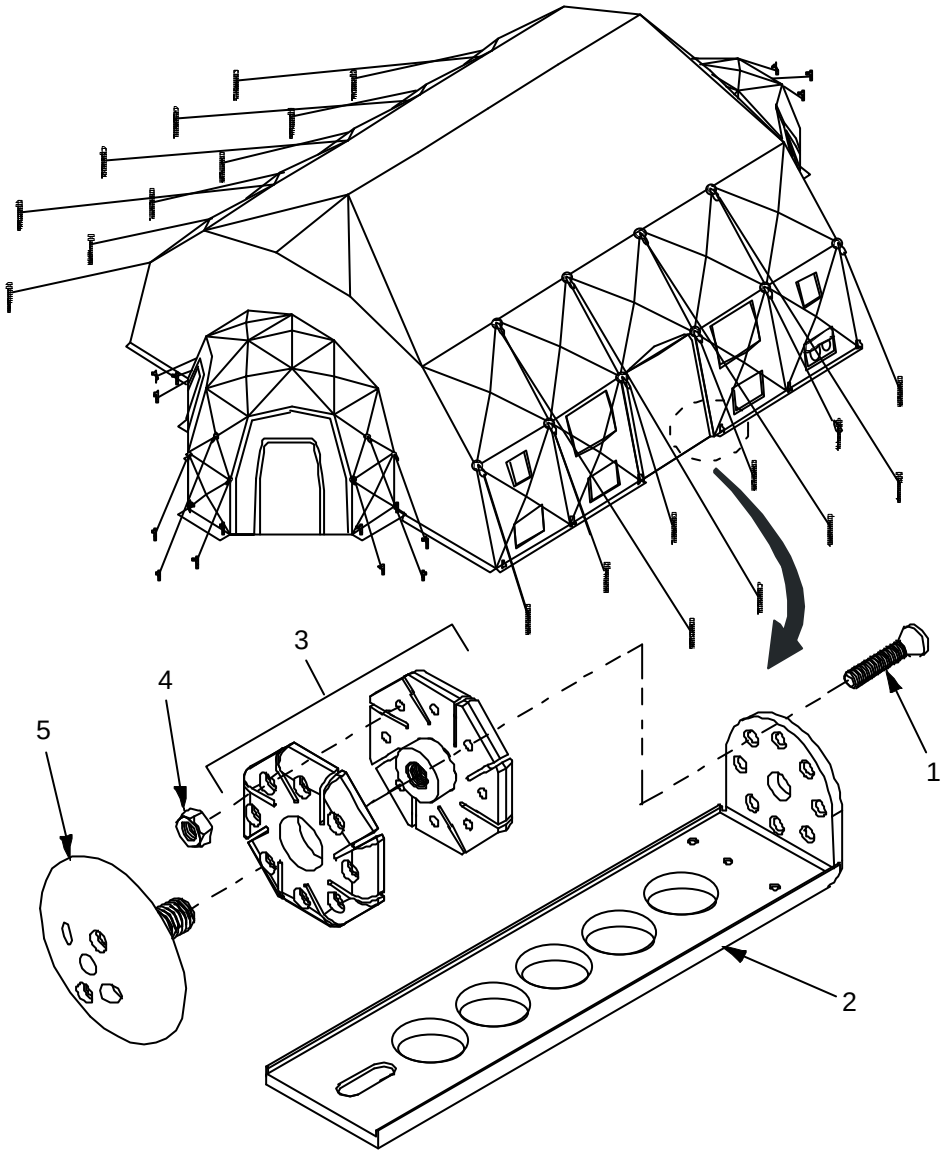


Figure 3. Main Staking Bracket Removal/Replacement.

END OF TASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CREW MAINTENANCE INSTRUCTIONS
J SHELTER
SHELTER – INTERNAL LOAD SUPPORT AND BLADDER REPAIR

GENERAL

This work package provides information on the removal/replacement of the shelter eye bolt, internal load support, bladder repair and bladder zipper repair for the J SHELTER.

WARNING

Remove rings, bracelets, wrist watches, neck chains, and any other jewelry before working around J SHELTER. Jewelry can catch on equipment and cause Failure to observe this warning can result in serious injury or death.

CAUTION

NEVER use thread-locking additive on eye-bolt. This will damage the threads and prevent the eye bolt from being removed at a later time for service.

NOTE

During normal situations, only the two internal load support are used. Two additional internal load supports are stored on the trailer for use when severe winds or snow are expected. When erecting shelter, replace damaged piece(s) of internal load supports with like piece(s) from spare internal loads and order replacement piece(s) as necessary.

Replacement items for tent repair kits are listed in Expendable and Durable list (WP 0031), or in the RPSTL (Chpt 6).

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

INTERNAL LOAD SUPPORT REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit
Ladder

References
WP 0005

Personnel Required
Two

NOTE

The following steps require the use of a ladder to reach the shelter wall.

REMOVAL

1. Remove two pins (Figure 1, Item 12) that secures eye bolts (Figure 1, Item 7) to internal load support (Figure 1, Items 2 through 6).
2. Slowly lower internal load support (Figure 1, Item 1) to the ground.
3. Disassemble internal load support (Figure 1, Items 2 through 6) as instructed in WP 0005 of this TM.
4. Replace damaged portions of internal load support with like items from spare supports.

END OF TASK

REPLACEMENT

CAUTION

When performing the following step, NEVER use thread-locking additive. This will damage the threads and prevent the items from being removed at a later time for service.

When performing the following steps, do not over tighten. This could damage the threads and prevent the items from being removed at a later time for service.

1. Assemble internal load support (Figure 1, Items 2 through 6) as instructed in WP 0005 of this TM.
2. Lift internal load support (Figure 1, Item 1) into position and align with eye bolts (Figure 1, Item 7).
3. Secure eye bolts (Figure 1, Item 7) to internal load support (Figure 1, Items 2 through 6) using pins (Figure 1, Item 12).

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

EYE BOLT REMOVAL/REPLACEMENT

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit
Ladder

Personnel Required
Two

NOTE

The items in the following step are attached to the shelter wall. A ladder is required to reach the eye bolts.

REMOVAL

1. Remove two pins (Figure 1, Item 12) that secures eye bolts (Figure 1, Item 7) to internal load support (Figure 1, Items 2 through 6).
2. Slowly lower internal load support (Figure 1, Item 1) to the ground.
3. Unscrew eye bolt (Figure 1, Item 7) from hub assembly (Figure 1, Items 8 and 9) and discard if damaged.
4 Remove and retain four screws (Figure 1, Item 11) that secure plate (Figure 1, Item 10) to shelter wall.
5. Separate plate (Figure 1, Item 10) from hub assembly (Figure 1, Items 8 and 9) discard damaged piece.

END OF TASK

REPLACEMENT

CAUTION

When performing the following step, NEVER use thread-locking additive on the eyebolt. This will damage the threads and prevent the items from being removed at a later time for service.

When performing the following steps, do not over tighten. This could damage the threads and prevent the eye bolt from being removed at a later time for service.

1. Attach plate (Figure 1, Item 10) to hub assembly (Figure 1, Items 8 and 9) and secure using four screws (Figure 1, Item 11).
2. Install eye bolt (Figure 1, Item 7) through plate (Figure 1, Item 10) and hub assembly (Figure 1, Items 8 and 9).
3. Lift internal load support (Figure 1, Item 1) into position and align with eye bolts (Figure 1, Item 7).
4. Secure eye bolts (Figure 1, Item 7) to internal load support (Figure 1, Items 2 through 6) using pins (Figure 1, Item 12).

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

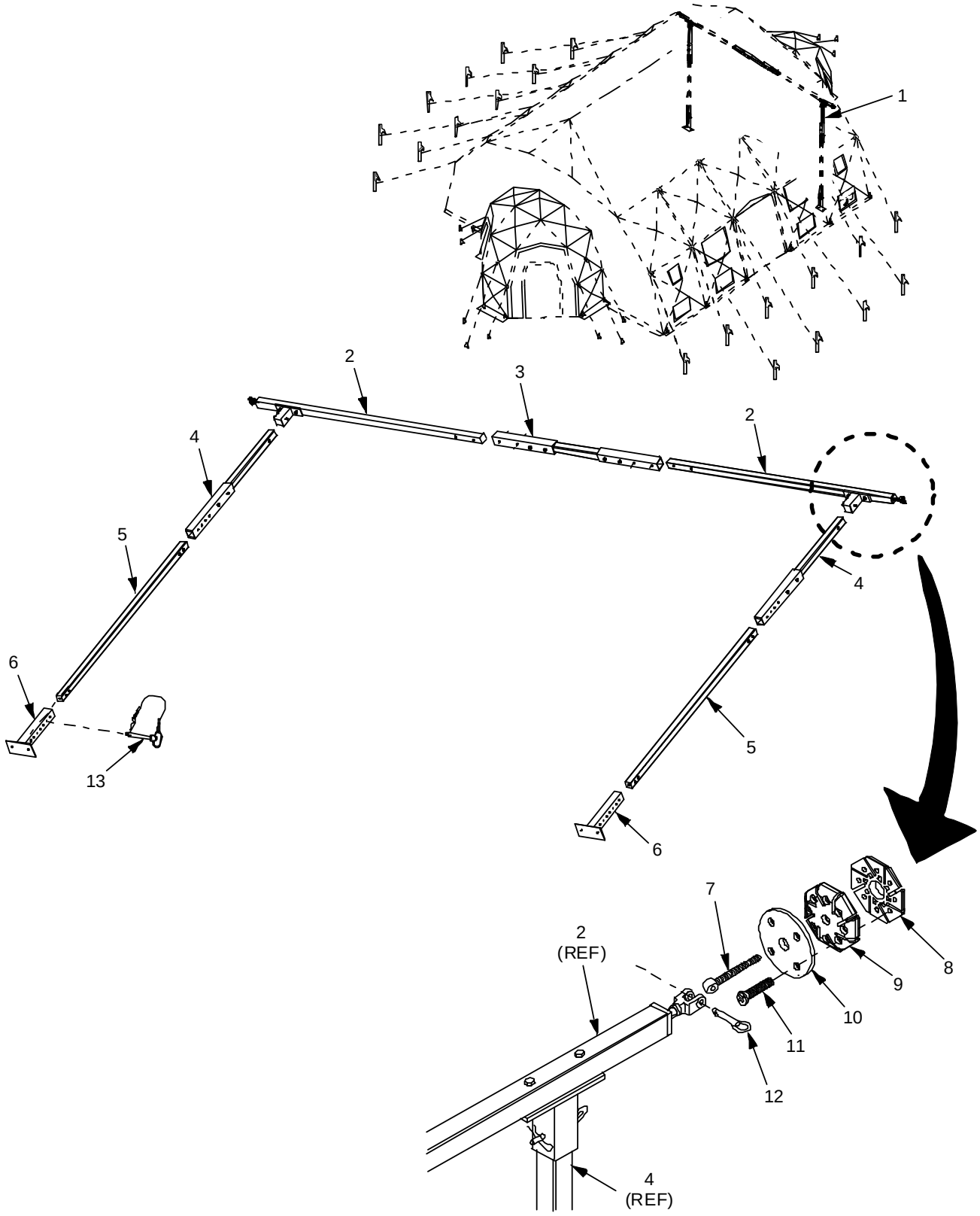


Figure 1. Internal Load Support and Eye Bolt Removal/Replacement.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

BLADDER REPAIR (USING SHELTER REPAIR KIT)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit
Blower

Personnel Required
One

Equipment Condition
Bladder unpacked and spread out

REPAIR

NOTE

Shelter repair kit is intended to repair a hole or tear 10 inch or less in size.

Holes that are less than 1 inch will not prevent the bladder from inflating.

1. If necessary, inflate bladder (Figure 2, Item 1) to help locate the damaged area (Figure 2, Item 2).

NOTE

When performing the following step:

- Allow approximately 1/2 inch extra on all sides.
- If patching a small hole or tear, cut the patch into a circle.
- If the tear or hole is too large cut the patch into an oval shape.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

REPAIR – Continued

2. Use scissors to cut patch (Figure 2, Item 3) large enough to cover the hole or tear.

3. Peal of backing from patch covering adhesive side.

4. Press patch (Figure 2, Item 3) firmly over damaged area (Figure 2, Item 2) of bladder (Figure 2, Item 1), smoothing away any air bubbles from under patch (Figure 2, Item 3). Patch will secure immediately.

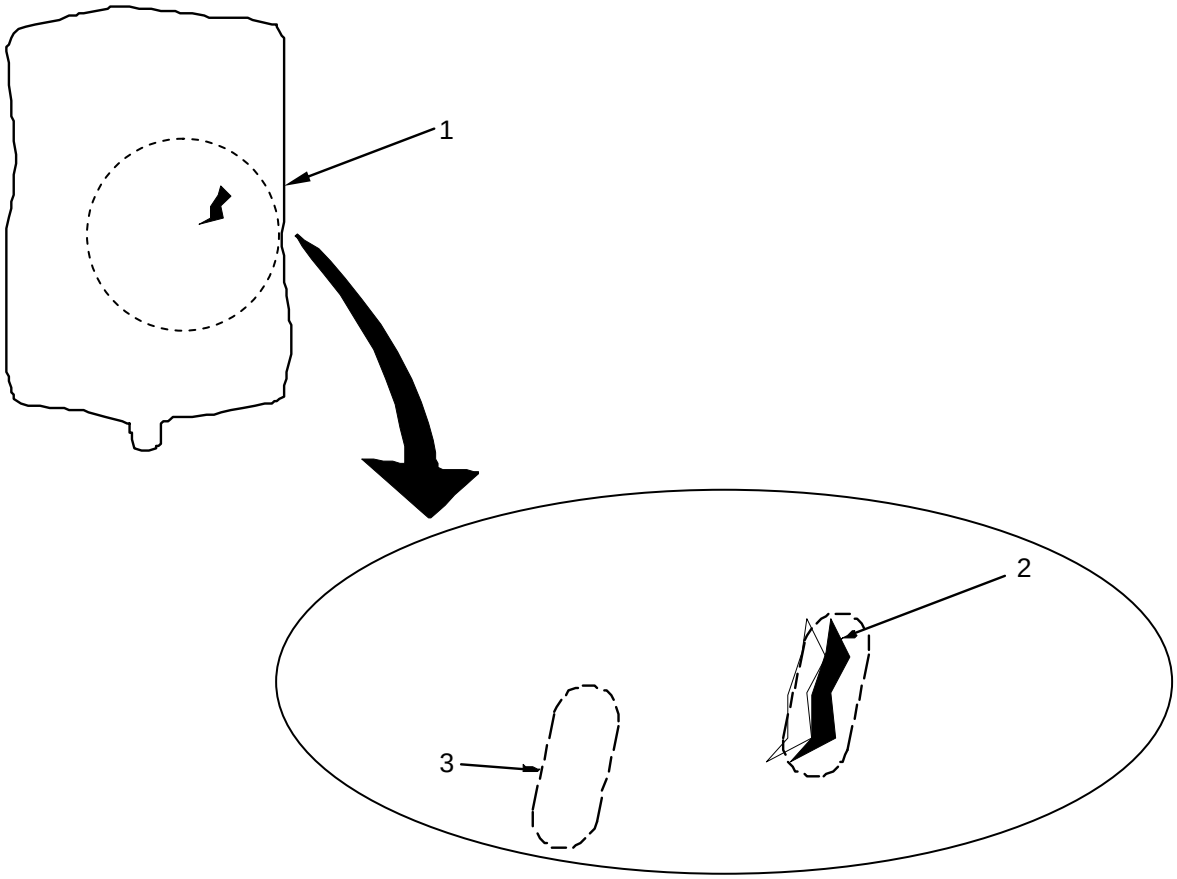


Figure 2. Bladder Repair.

END OF TASK

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

BLADDER ZIPPER REPAIR (USING SHELTER REPAIR KIT)

INITIAL SETUP:

Tools and Special Tools
Shelter repair kit

Equipment Condition
Bladder unpacked and spread out

Personnel Required
One

NOTE

Shelter repair kit is intended to temporarily repair a broken zipper so that shelter can be taken down.

REPAIR

1. Identify broken zipper (Figure 3, Item 1).
2. Using curved heavy duty needle and thread from repair kit sew broken zipper closed.

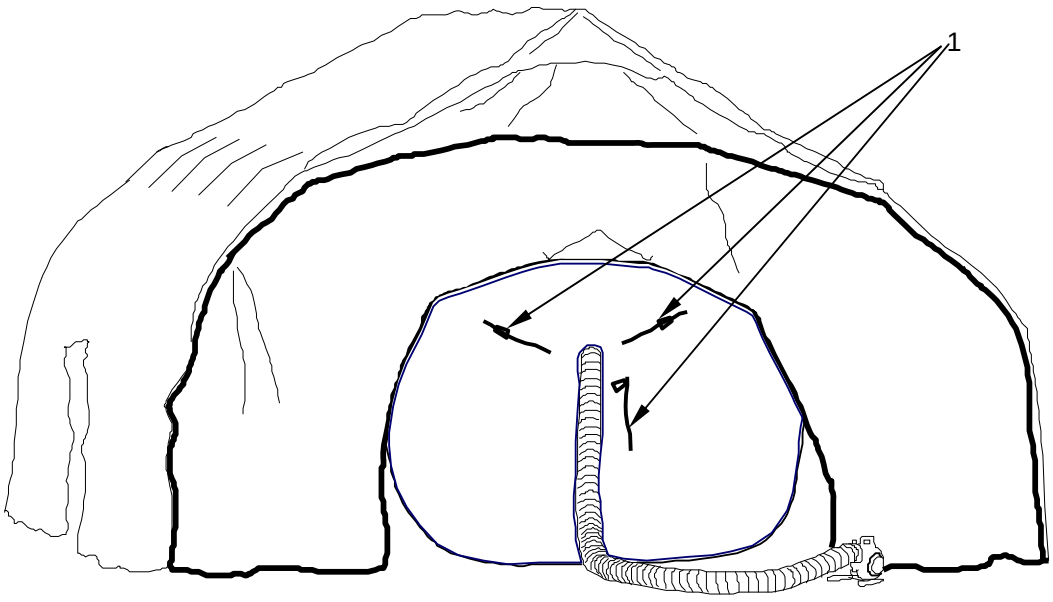


Figure 3. Bladder Zipper Repair.

END OF TASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CHAPTER 5

MAINTAINER MAINTENANCE INSTRUCTIONS FOR J SHELTER TRAILER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

MAINTAINER MAINTENANCE INSTRUCTIONS
J SHELTER

INITIAL SETUP:

Tools and Special Tools
General mechanic's tool kit (WP 0028, Item 1)

Personnel Required
Two

Table 1. J Shelter Maintenance Checks and Services – Shelter Electrical.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1		**SHELTER**		
	Before	Light Set, Shelter	1. Check lamps. Verify that no visible damage is present. If necessary replace bulb.	Damaged lighting.
			2. Check fuse. Verify that fuse is good and properly installed. If necessary replace fuse.	Fuse blown.
	Before	PDU	1. Check connectors. Verify that no visible damage is present.	Damaged electrical connections.
			2. Check switch & meter. Connect AC input. Rotate switch through settings. Verify that switch and meter are both fully operational.	Switch or meter not functioning properly.

END OFTASK

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

CHAPTER 6

PARTS INFORMATION FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J SHELTER
REPAIR PARTS LIST
MAIN SHELTER INSTALLATION, 1004304, 1004086

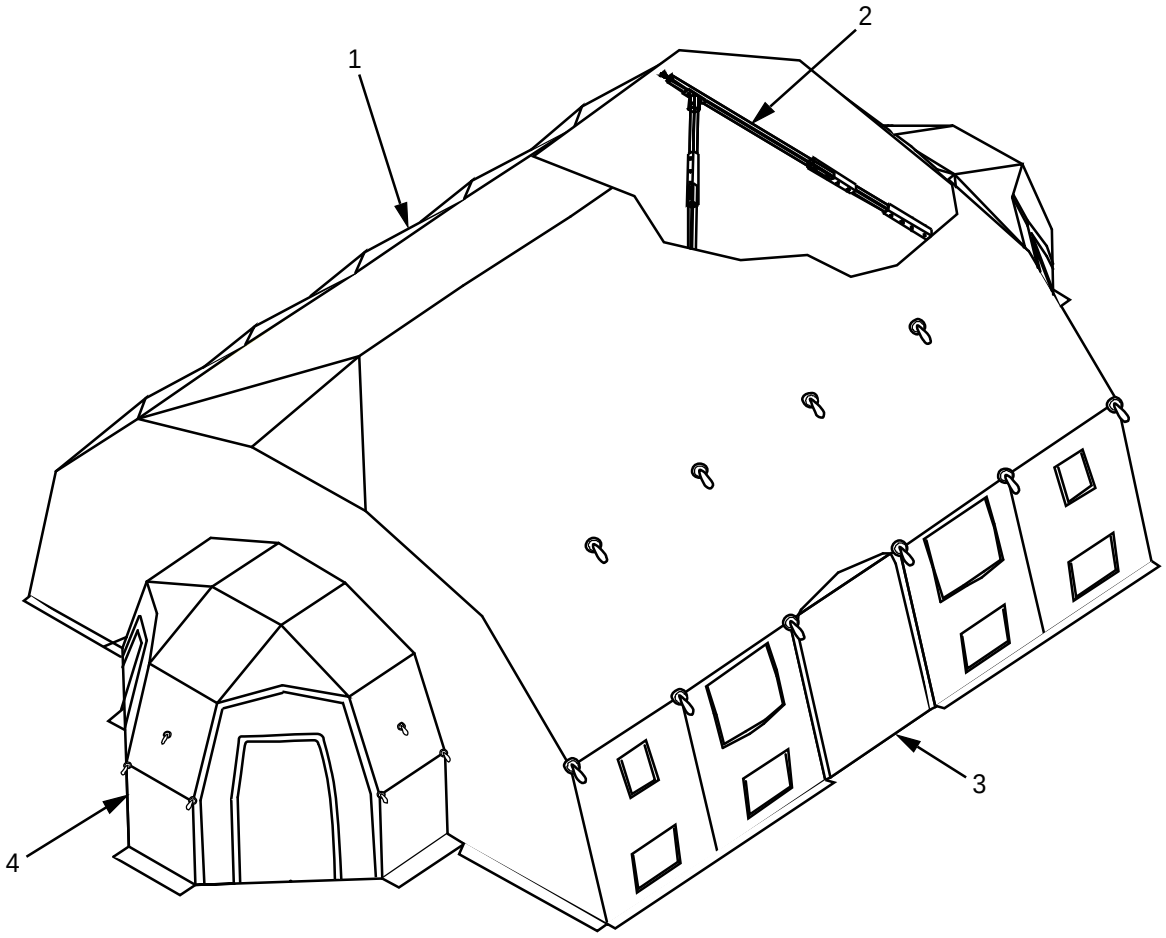


Figure 1. J Shelter Installation, 1004304, 1004086

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					FIG. 1 J SHELTER Complete, 1004304 1004086 ,	
1	XBCDD	8340-01-580-3450	0WFM3	JA201420	SOFTWALL SHELTER(SEE FIGURE 2 FOR BREAKDOWN) ..... UOC: 6FB	1
1	XBCDD	8340-01-580-3533	0WFM3	JA201400	SOFTWALL SHELTER(SEE FIGURE 2 FOR BREAKDOWN) ..... UOC: 6FC	1
2	XCCFF	8340-01-556-0953	0WFM3	JA200520	INTERNAL LOAD SUPPORTS(SEE FIGURE 4 FOR BREAKDOWN).....	4
3	XCCFF		0WFM3	JA200300	SHELTER DOORS AND CONNECTOR SET(SEE FIGURE 5 FOR BREAKDOWN) ..... UOC: 6FB	2
3	XCCFF		0WFM3	JA200320	SHELTER DOORS AND CONNECTOR SET(SEE FIGURE 5 FOR BREAKDOWN) ..... UOC: 6FC	2
4	XCCFF		0WFM3	SH201-0001G	END CAP,SHELTER(SEE FIGURE 3 FOR BREAKDOWN) ..... UOC: 6FB	2
4	XCCFF		0WFM3	SH201-0001T	END CAP,SHELTER(SEE FIGURE 3 FOR BREAKDOWN) ..... UOC: 6FC	2

END OF FIGURE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J SHELTER
REPAIR PARTS LIST
SOFT WALL, SHELTER, JA201420, JA201400

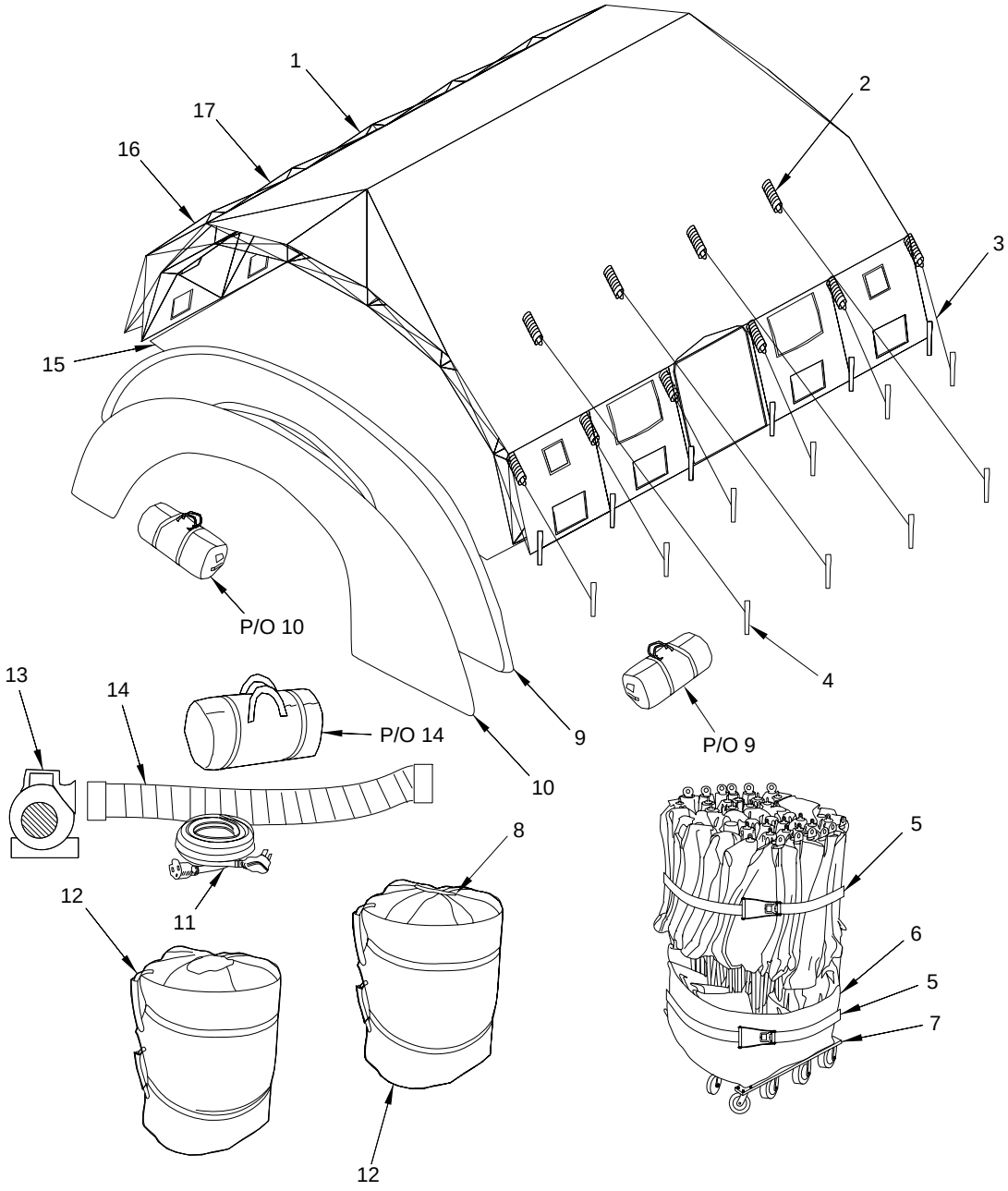


Figure 2 Soft Wall, Shelter, JA201420, JA201400 (Sheet 1 of 5)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

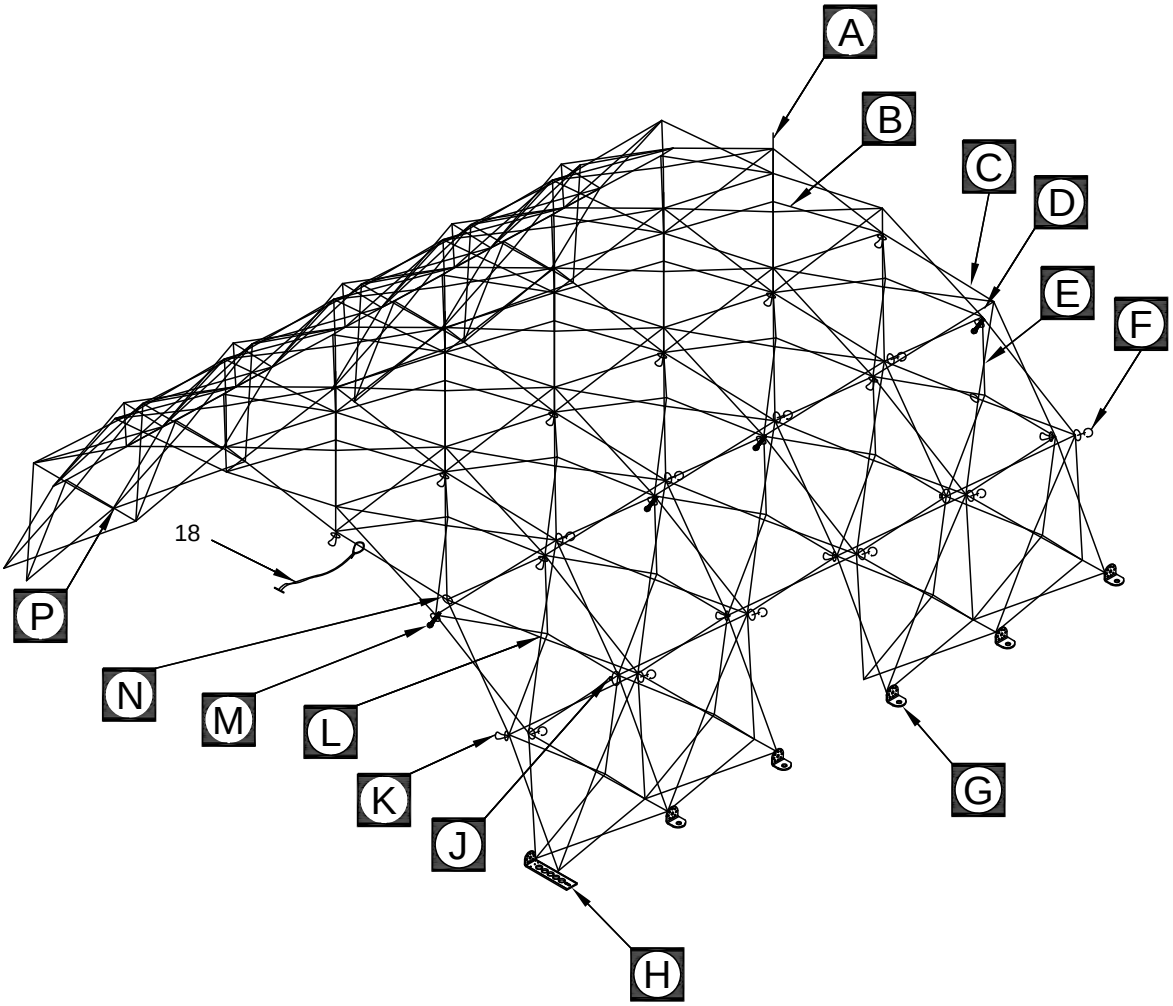


Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 2 of 5)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

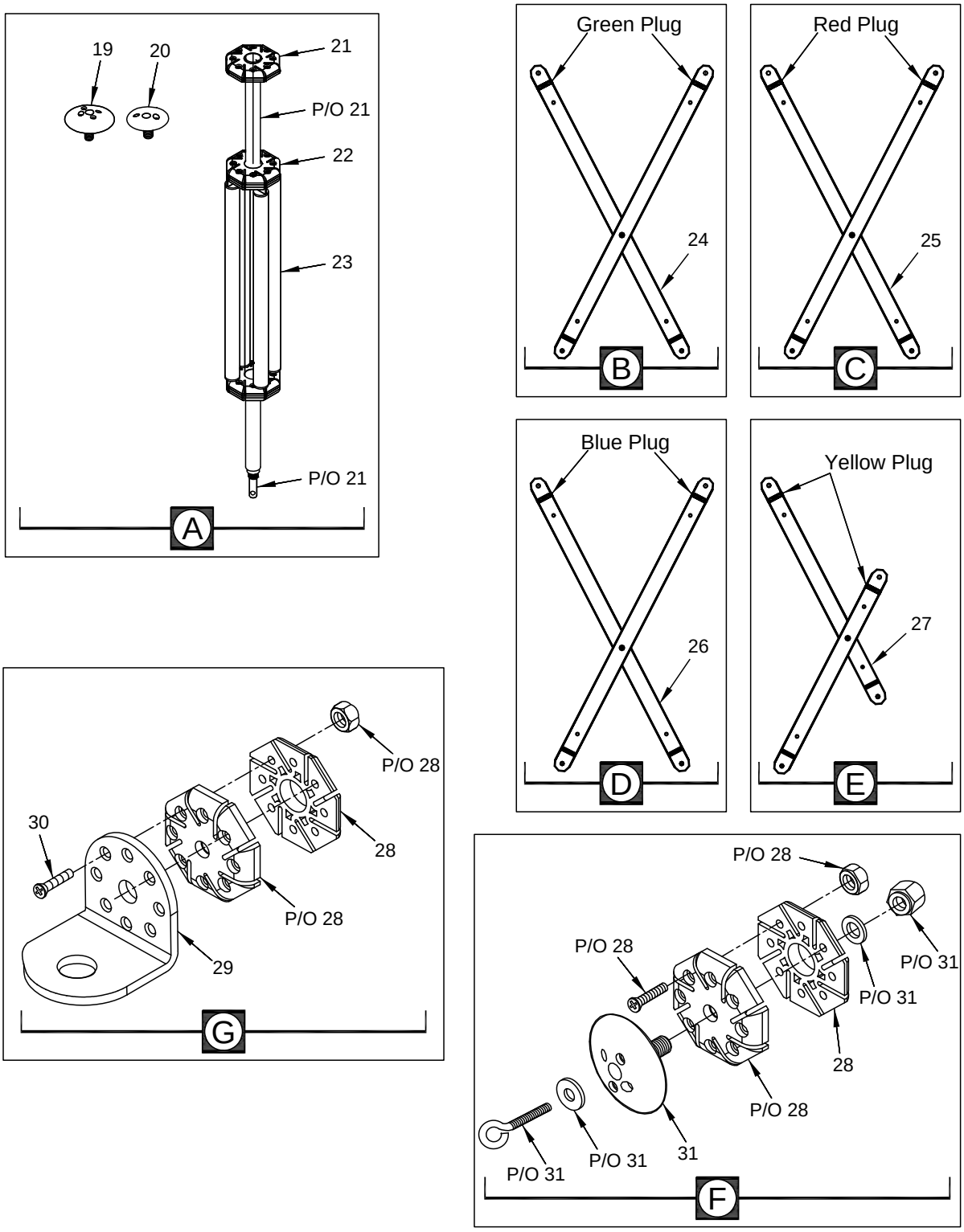


Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 3 of 5)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

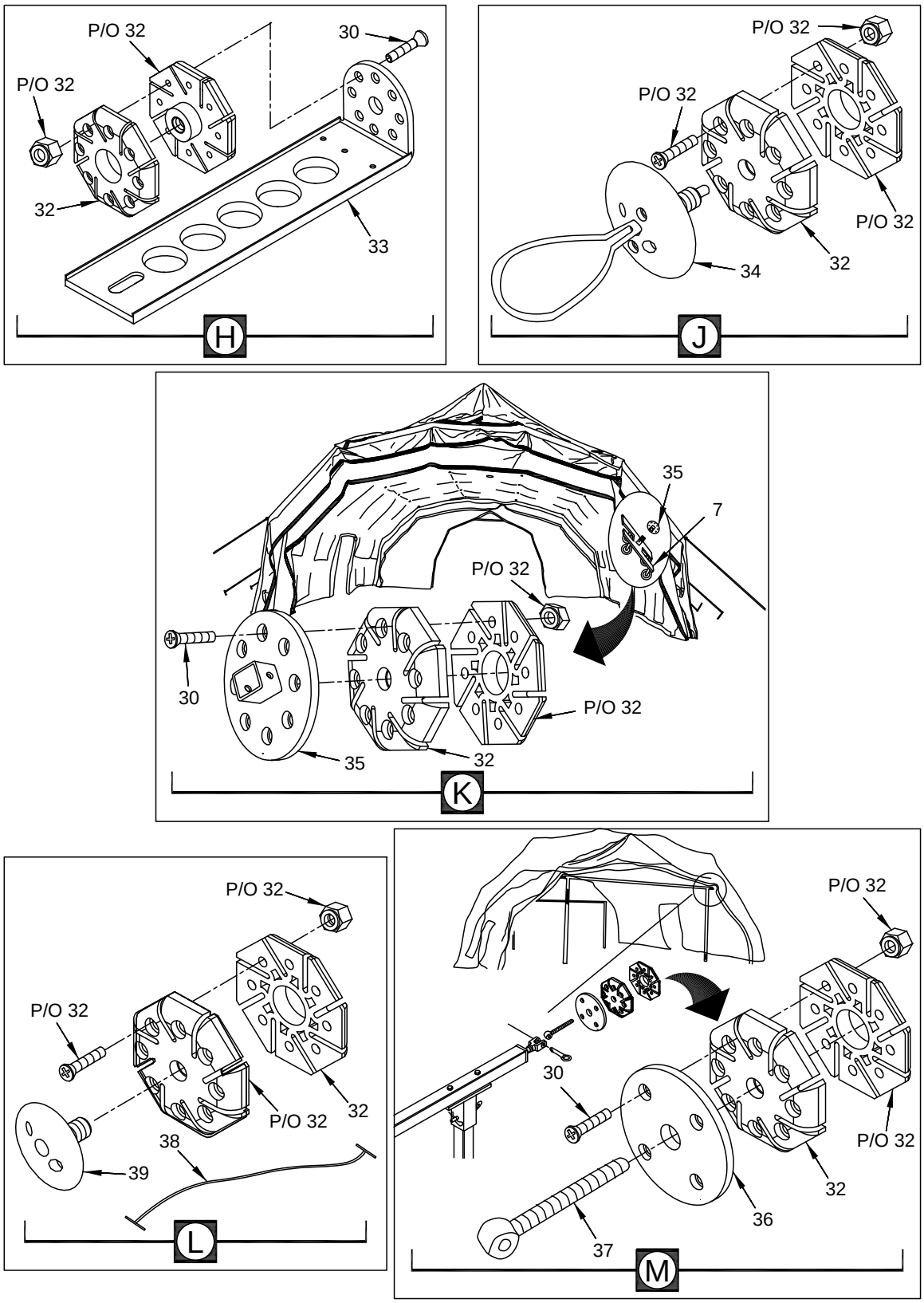


Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 4 of 5)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

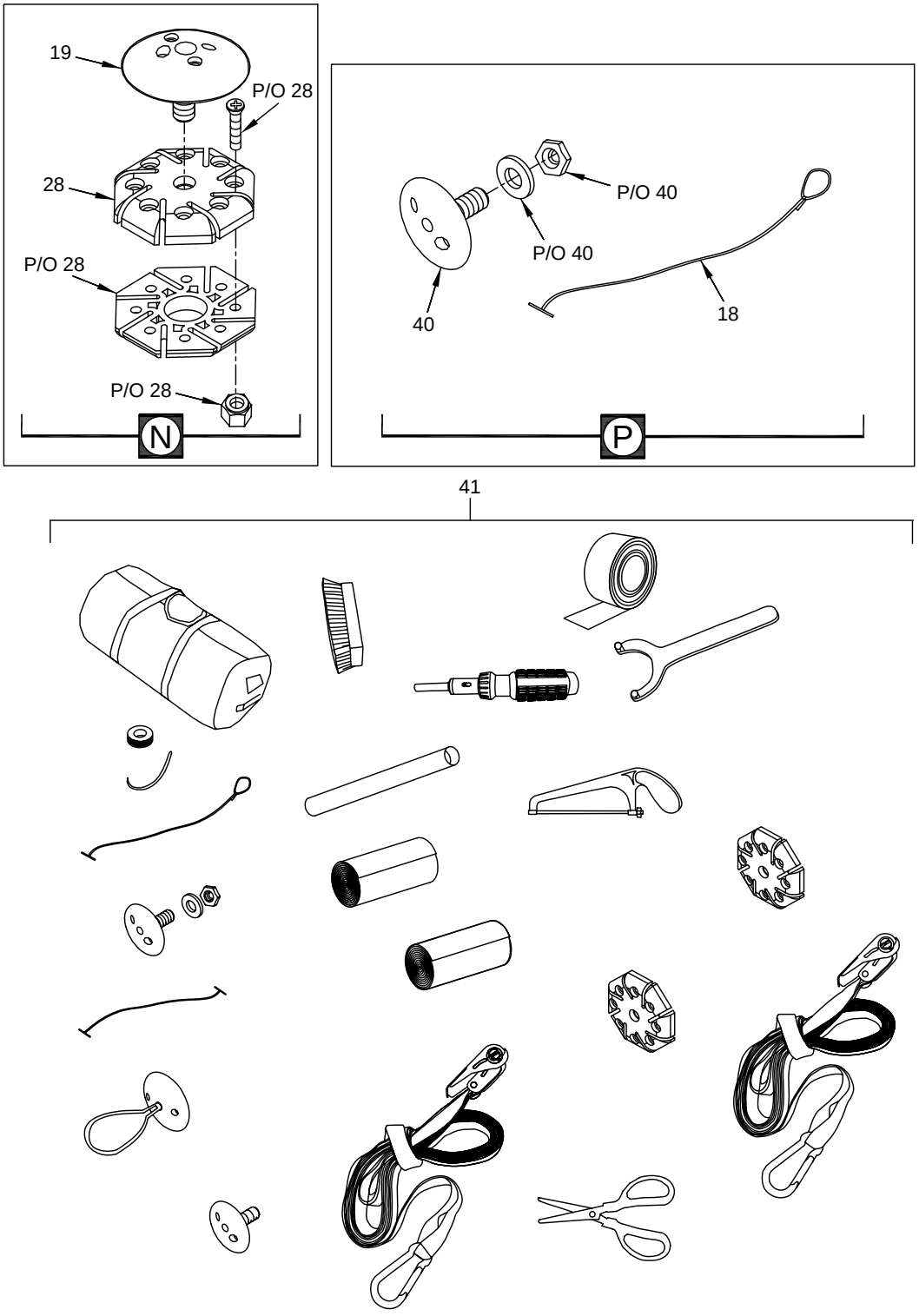


Figure 2. Soft Wall, Shelter, JA201420, JA201400 (Sheet 5 of 5)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					FIG. 2 SOFT WALL, SHELTER, JA201420,JA201400	
1	PACZZ	8340-01-533-1649	0WFM3	JA200120	COVER,SHELTER REPLACEMENT .... UOC: 6FB	1
1	PACZZ	8340-01-533-1648	0WFM3	JA200140	COVER,SHELTER REPLACEMENT .... UOC: 6FC	1
2	PACZZ	8340-01-580-4208	0WFM3	JS900500	LINE,TENT	8
3	PACZZ	8340-01-580-4235	0WFM3	JS900520	LINE,TENT	12
4	PACZZ	8340-01-556-0951	0WFM3	JA200820	STAKE,J	32
5	PACZZ	3990-01-559-2000	0WFM3	JA200460	TIE DOWN,CARGO,VEHICLE	2
6	PACZZ	8340-01-580-4373	0WFM3	JA200400	WRAP,PROTECTIVE	2
7	PACZZ	3920-01-558-7593	0WFM3	JA201480	WHEEL,SOLID,NONMETALLIC	4
8	PACBZ		0WFM3	JA200360	BLADDER	1
9	PACZZ	8340-01-556-0946	0WFM3	JA200160	FACEPLATE,TENT	2
10	XBCZZ	8340-01-579-8536	0WFM3	JA200180	T-PLATE,EXTERIOR ..... UOC: 6FB	2
10	XBCZZ		0WFM3	JA200200	T-PLATE,EXTERIOR ..... UOC: 6FC	2
11	PACZZ	5995-01-558-8495	0WFM3	T295112	CABLE ASSEMBLY,SPECIAL PURPOSE, ELECTRICAL	1
12	PACZZ		0WFM3	JA200380	WRAP,PROTECTIVE	2
13	PACZZ	4140-01-558-6481	0WFM3	T290050	FAN,CENTRIFUGAL	1
14	PACZZ	4720-01-558-8847	0WFM3	JA201162	HOSE,AIR DUCT	1
15	PACZZ	8340-01-556-0948	0WFM3	JA200340	FLOOR,TENT	1
16	PACZZ	8340-01-533-1571	0WFM3	JA200100	TENT LINER	1
17	PACZZ	8340-01-533-1696	0WFM3	JA201430	FRAME SECTION,TENT ..... UOC: 6FB	1
17	PACZZ	8340-01-533-1584	0WFM3	JA201410	FRAME SECTION,TENT ..... UOC: 6FC	1
18	PACZZ	4020-01-558-7592	0WFM3	JF700920	CORD ASSEMBLY,ELASTIC	80
19	PACZZ	5340-01-558-9804	0WFM3	JA200881	KEEPER,BELT-STRAP ..... UOC: 6FB	2
19	PACZZ	5340-01-558-8533	0WFM3	JA200901	KEEPER,BELT-STRAP ..... UOC: 6FC	2
20	PACZZ	5340-01-558-8890	0WFM3	A601651	KEEPER,BELT-STRAP ..... UOC: 6FB	3
20	PACZZ	5365-01-558-6149	0WFM3	A601661	PLUG,MACHINE THREAD ..... UOC: 6FC	3
21	PACZZ	8340-01-580-4071	0WFM3	JF700851	RISER,FLOATING HUB ..... UOC: 6FB	5
21	PACZZ		0WFM3	JF700850	RISER,FLOATING HUB ..... UOC: 6FC	5

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) Item No.	(2) SMR Code	(3) NSN	(4) CageC	(5) Part Number	(6) Description and Usable On Code (UOC)	(7) Qty
22	PACZZ		0WFM3	SH533-0809G	RISER,HUB KIT UOC: 6FB	10
22	PACZZ		0WFM3	SH533-0809T	RISER,HUB KIT UOC: 6FC	10
23	PACZZ	8340-01-580-4103	0WFM3	JF700910	STRUT	20
24	PACZZ	8340-01-533-1659	0WFM3	JF700230	STRUT,TENT TRANSOM	20
25	PACZZ		0WFM3	JF700220	STRUT,TENT TRANSOM	36
26	PACZZ	8340-01-533-1658	0WFM3	JF700210	STRUT,TENT TRANSOM	44
27	PACZZ	8340-01-533-1657	0WFM3	JF700240	STRUT,TENT TRANSOM	112
28	PACZZ	5340-01-558-7597	0WFM3	SH533-0805G	HUB KIT,J,GREEN UOC: 6FB	52
28	PACZZ	5340-01-558-9377	0WFM3	SH533-0805T	HUB KIT,J,TAN UOC: 6FC	52
29	PACZZ	5340-01-559-1676	0WFM3	JA200720	BRACKET,ANGLE	12
30	PACZZ	5305-01-558-7192	0WFM3	JA201500	SCREW,MACHINE	256
31	PACZZ	5306-01-558-7679	0WFM3	SH533-0807G	BOLT,EYE UOC: 6FB	20
31	PACZZ	5306-01-558-9369	0WFM3	SH533-0807T	BOLT,EYE UOC: 6FC	20
32	PACZZ	5340-01-559-0987	0WFM3	SH533-0805	CONNECTOR,ROD END	80
33	PACZZ	5340-01-559-0033	0WFM3	JA200780	BRACKET,MOUNTING	12
34	PACZZ	5340-01-558-7324	0WFM3	JA200980	KEEPER,LOOPED	24
35	PACZZ	5340-01-558-7651	0WFM3	JA200760	MOUNT,RESILIENT,GENERAL PURPOSE	4
36	PACZZ	5340-01580-3521	0WFM3	JA201180	PLATE,MOUNTING	8
37	PACZZ	5306-01-558-7363	0WFM3	JA200700	BOLT,EYE	8
38	PACZZ	4020-01-558-7338	0WFM3	JA201220	CORD ASSEMBLY,ELASTIC	32
39	PACZZ	5340-01-558-8689	0WFM3	JA201280	KEEPER,BELT-STRAP	28
40	PACZZ	5340-01-558-7657	0WFM3	SH533-0808	KEEPER,SLIDE	113
41	PACZZ	8340-01-556-1033	0WFM3	JA200560	REPAIR KIT,J GREEN(SEE EXPENDABLE ITEMS LIST) UOC: 6FB	1
41	PACZZ	8340-01-580-4333	0WFM3	JA200580	REPAIR KIT,SHELTER(SEE EXPENDABLE ITEMS LIST) UOC: 6FC	1

END OF FIGURE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J SHELTER
REPAIR PARTS LIST
END CAP, SHELTER, SH201-0001G, SH201-0001T

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

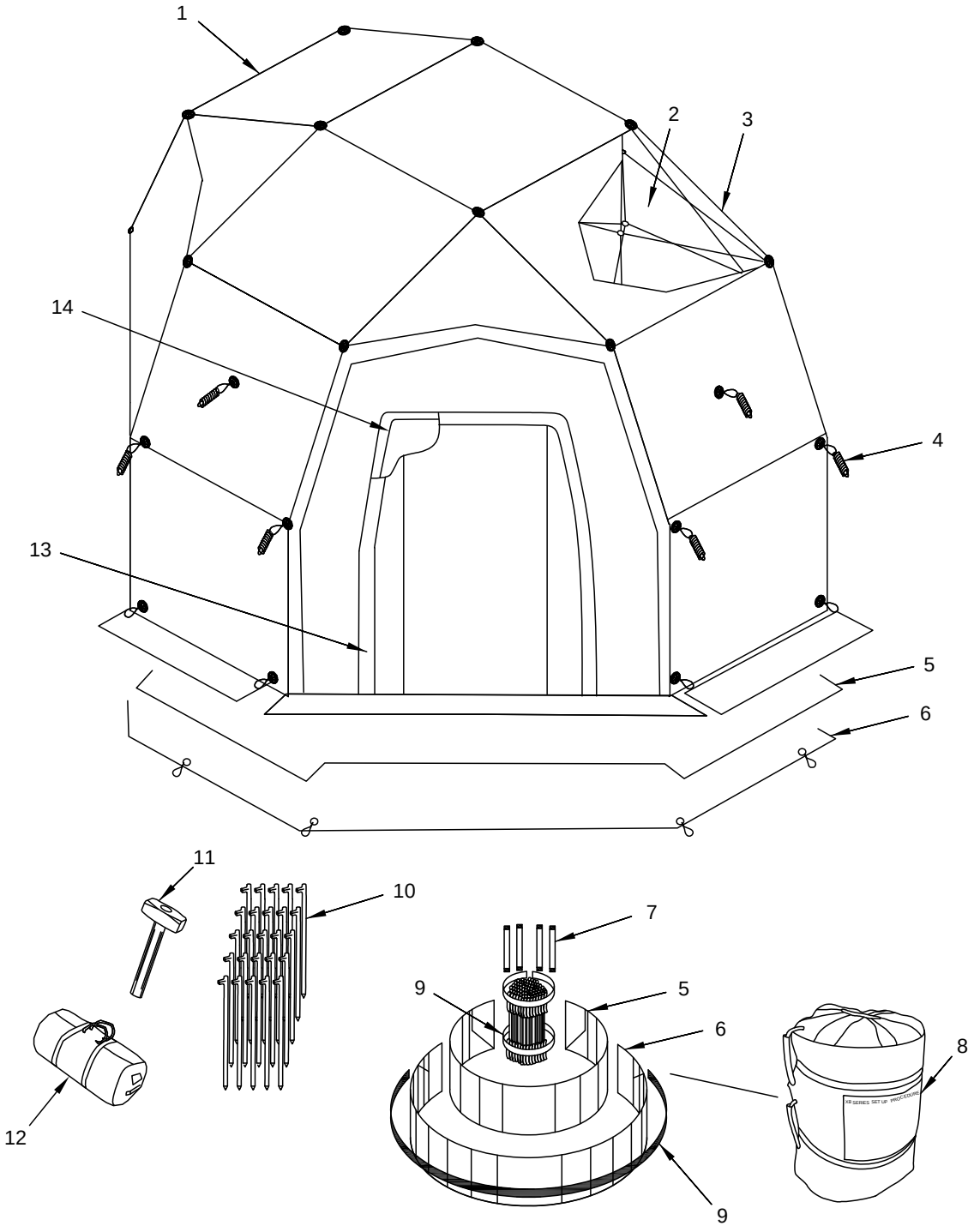


Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 1 of 3)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

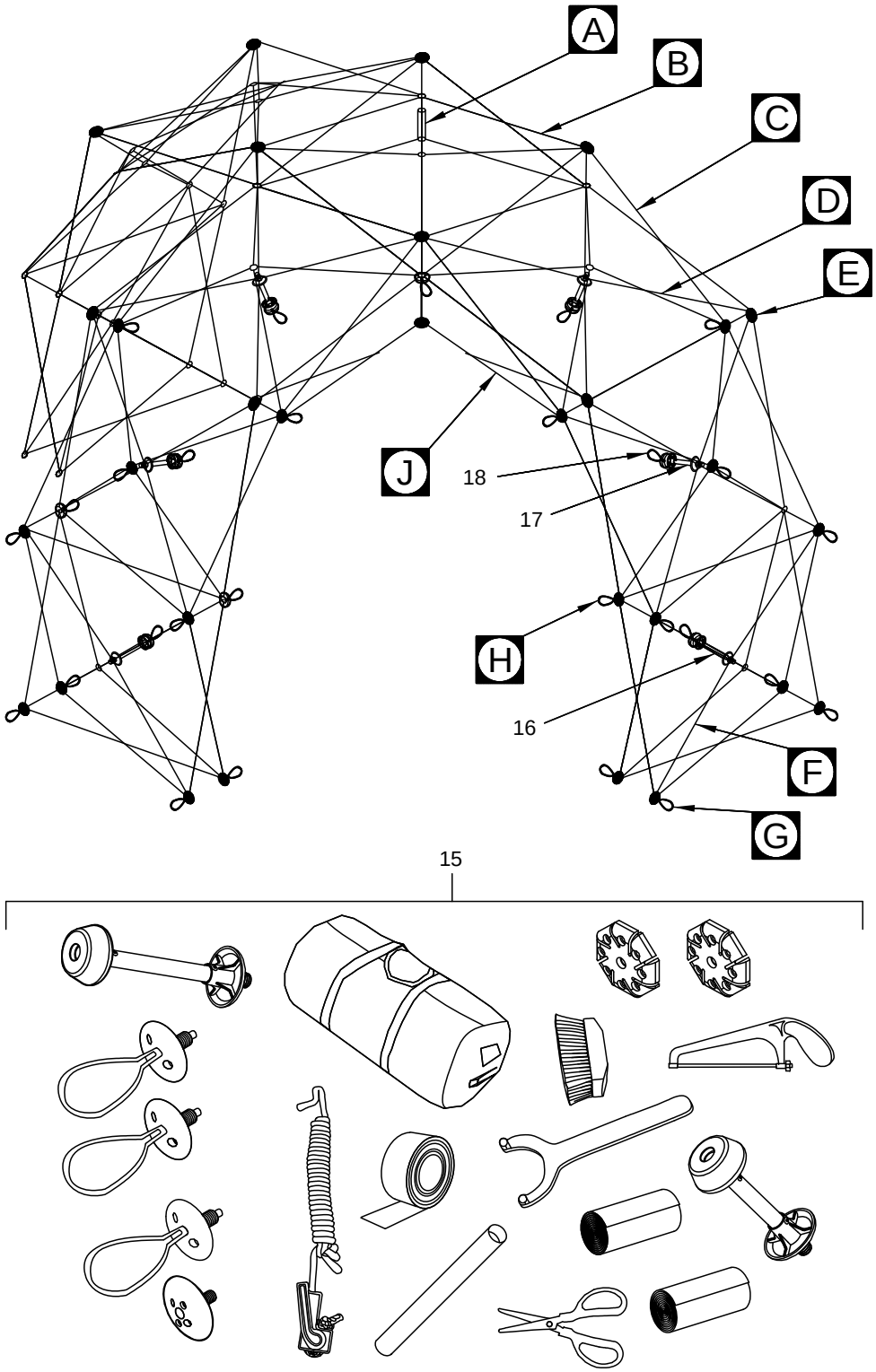


Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 2 of 3)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

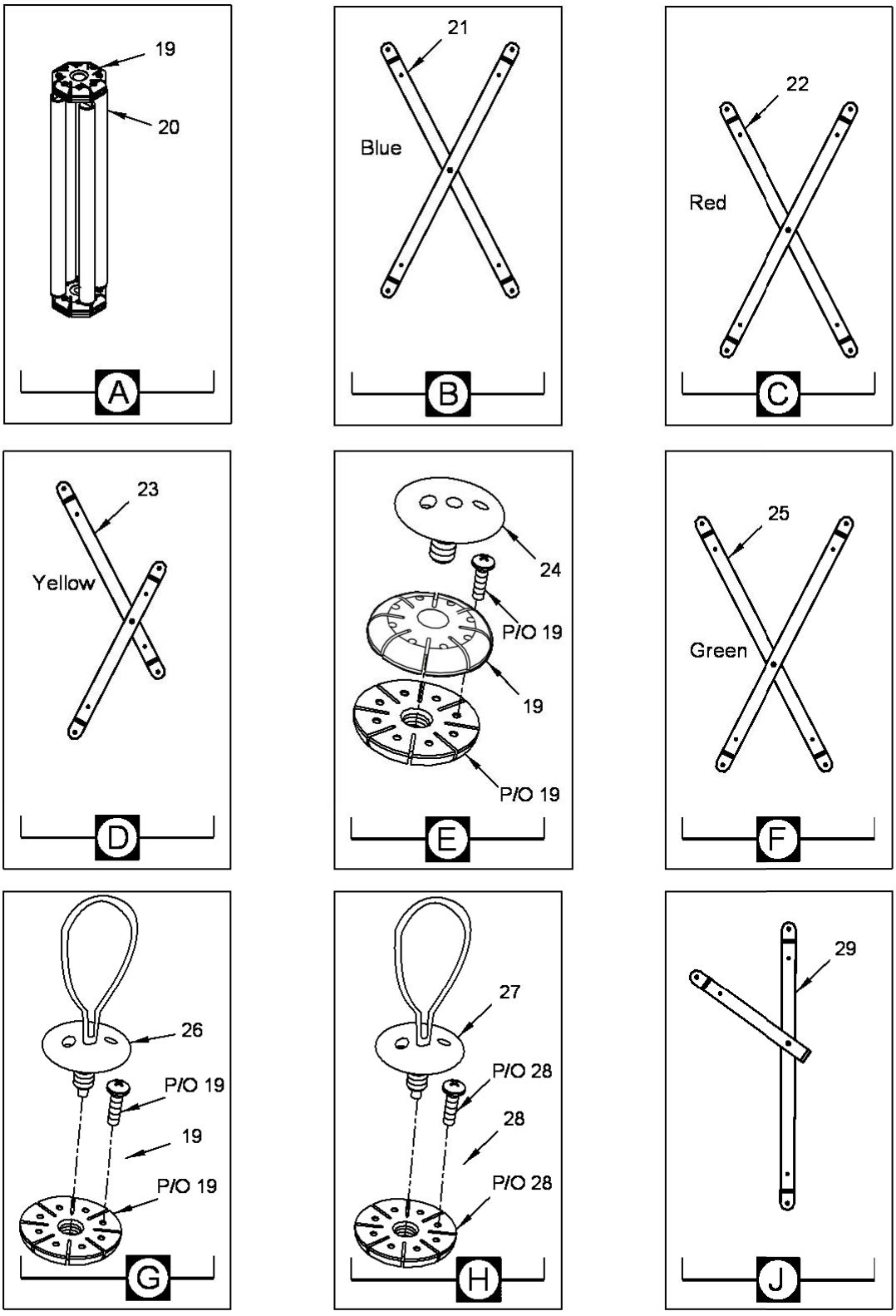


Figure 3. End Cap, Shelter, SH201-0001G, SH201-0001T (Sheet 3 of 3)

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					FIG. 3 END CAP, SHELTER, SH201-0001G, SH201-0001T	
1	PACZZ	8340-01-533-1663	0WFM3	JA201710	COVER EXTERIOR ..... UOC: 6FB	1
1	PACZZ	8340-01-533-1664	0WFM3	JA201720	COVER,EXTERIOR ..... UOC: 6FC	1
2	PACZZ	8340-01-580-3594	0WFM3	JA201700	COVER,INTERIOR	1
3	XBCZZ		0WFM3	10101TG	FRAME,TENT ..... UOC: 6FB	1
3	XBCZZ		0WFM3	10101TT	FRAME,TENT ..... UOC: 6FC	1
4	PACZZ	4020-01-570-4924	0WFM3	A602050	ROPE,FIBROUS	9
5	PACZZ	8340-01-556-7417	0WFM3	JS900862T	FLOOR,TENT	1
6	PACZZ	8340-01-556-8091	0WFM3	JS900880T	GROUND CLOTH	1
7	PACZZ	8340-01-556-9783	0WFM3	A602600	POLE,TENT	4
8	PACZZ		0WFM3	JA201150	BAG,TRANSPORT	1
9	PACZZ	8340-01-556-7418	0WFM3	A600270	STRAP,TIEDOWN TENT	3
10	PACZZ	8340-01-556-0950	0WFM3	JA201320	J STAKE SET 18” RED (SET OF 25) ...	2
11	PACZZ		049W4	A600650	HAMMER	1
12	PACZZ		0WFM3	JA201080	BAG,TRANSPORT	1
13	PACZZ		0WFM3	SH522-0003G	DOOR,EXTERIOR ..... UOC: 6FB	2
13	PACZZ		0WFM3	SH522-0003T	DOOR,EXTERIOR ..... UOC: 6FC	2
14	PACZZ		0WFM3	SH520-0004	DOOR,INTERIOR	2
15	PACZZ		0WFM3	JA200570	REPAIR KIT,SHELTER(SEE EXPENDABLE ITEMS LIST) ..... UOC: 6FB	1
15	PACZZ		0WFM3	JA200590	REPAIR KIT,SHELTER(SEE EXPENDABLE ITEMS LIST) ..... UOC: 6FC	1
16	PACZZ	5340-01-558-8873	0WFM3	F329908	CONNECTOR,ROD END	3
17	PACZZ	5340-01-558-8848	0WFM3	F329905	CONNECTOR,ROD END	6
18	PACZZ	5340-01-558-7313	0WFM3	A601680	KEEPER, LOOPED.....	22
19	PACZZ	5340-01-558-8752	0WFM3	SH410-0001G	CONNECTOR,ROD END ..... UOC: 6FB	53
19	PACZZ	5340-01-558-8512	0WFM3	SH410-0001T	CONNECTOR,ROD END ..... UOC: 6FC	53
20	PACZZ		0WFM3	F327991	STRUT ASSEMBLY.....	4
21	PACZZ	8340-01-571-9871	0WFM3	F329601	STRUT,TENT TRANSOM.....	19
22	PACZZ	8340-01-571-9552	0WFM3	F329631	STRUT,TENT TRANSOM.....	12
23	PACZZ	8340-01-571-6590	0WFM3	F329781	STRUT,TENT TRANSOM.....	24
24	PACZZ	5340-01-558-8890	0WFM3	A601651	KEEPER,BELT-STRAP ..... UOC: 6FB	19

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
24	PACZZ	5365-01-558-6149	0WFM3	A601661	PLUG,MACHINE THREAD ..... UOC: 6FC	19
25	PACZZ	8340-01-571-9875	0WFM3	F329751	STRUT,TENT TRANSOM	16
26	PACZZ	5340-01-558-9677	0WFM3	A601650	KEEPER,BELT-STRAP..... UOC: 6FB	15
26	PACZZ	5340-01-558-9133	0WFM3	A601660	KEEPER,BELT-STRAP..... UOC: 6FC	15
27	PACZZ	5340-01-558-7672	0WFM3	A601670	KEEPER,BELT-STRAP.....	10
28	PACZZ	5340-01-558-8758	0WFM3	SH410-0001W	CONNECTOR,ROD END.....	10
29	PACZZ	8340-01-579-8537	0WFM3	F329894	STRUT,TENT TRANSOM	6
					END OF FIGURE	

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J SHELTER
REPAIR PARTS LIST
INTERNAL LOAD SUPPORTS, JA200520

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

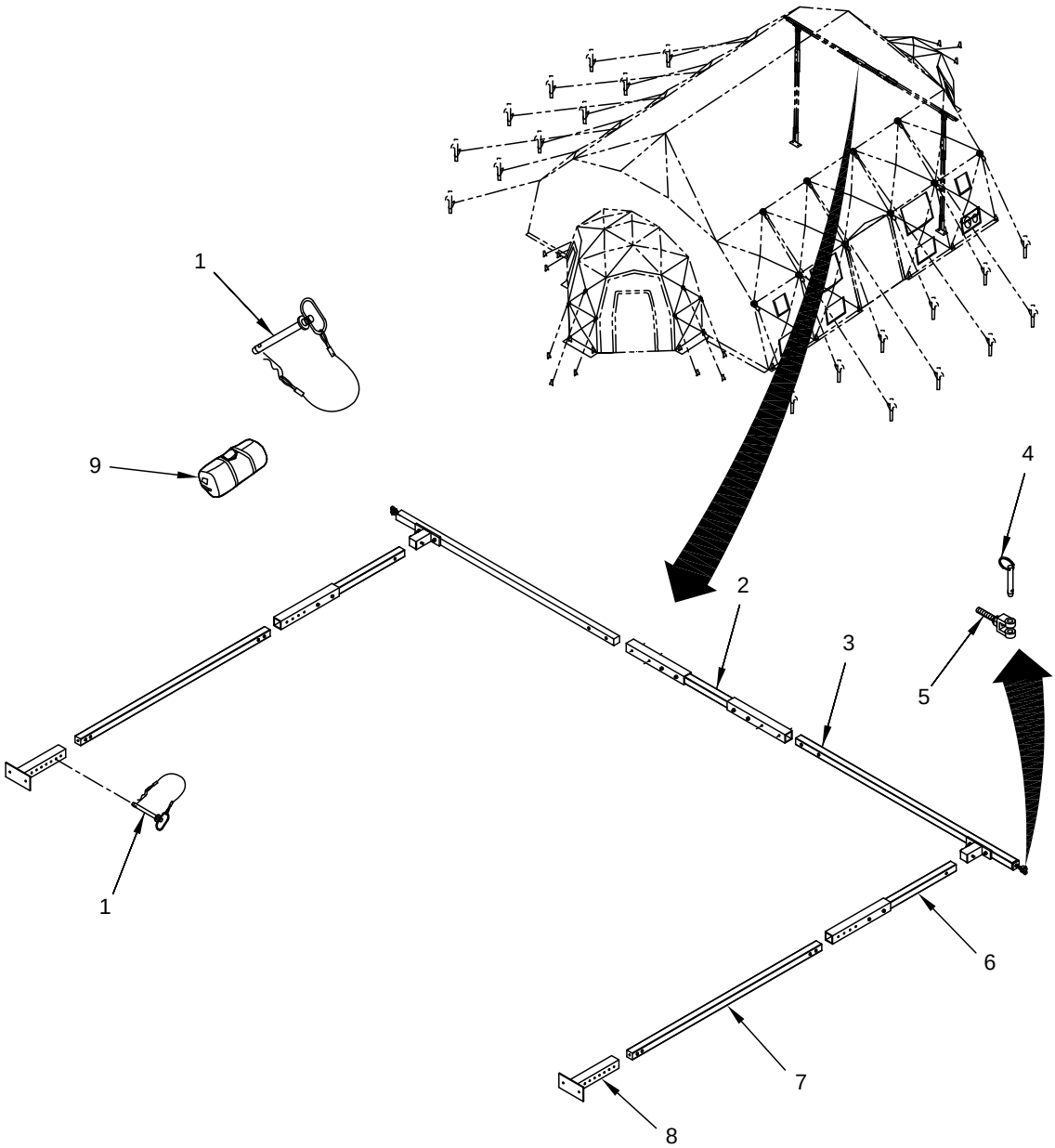


Figure 4. Internal Load Supports, JA200520

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					FIG. 4 INTERNAL LOAD SUPPORTS, JA200520	
1	PACZZ	5315-01-529-0802	0WFM3	JA200740	PIN,QUICK RELEASE	60
2	XBCZZ		0WFM3	JA200523	SUPPORT	1
3	XBCZZ		0WFM3	JA200522	SUPPORT	2
4	PACZZ	5315-01-559-2061	0WFM3	JA200800	PIN,QUICK RELEASE	2
5	PACZZ	5340-01-558-9551	0WFM3	JA200605	CLEVIS,ROD END	2
6	XBCZZ		0WFM3	JA200521	SUPPORT	2
7	XBCZZ		0WFM3	JA200527	SUPPORT	2
8	XBCZZ		0WFM3	JA200528	LEVELER	2
9	PACZZ		0WFM3	JA201100	BAG,TRANSPORT	1
					END OF FIGURE	

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J SHELTER
REPAIR PARTS LIST
SHELTER DOORS AND CONNECTOR SET, JA200300, JA200320

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

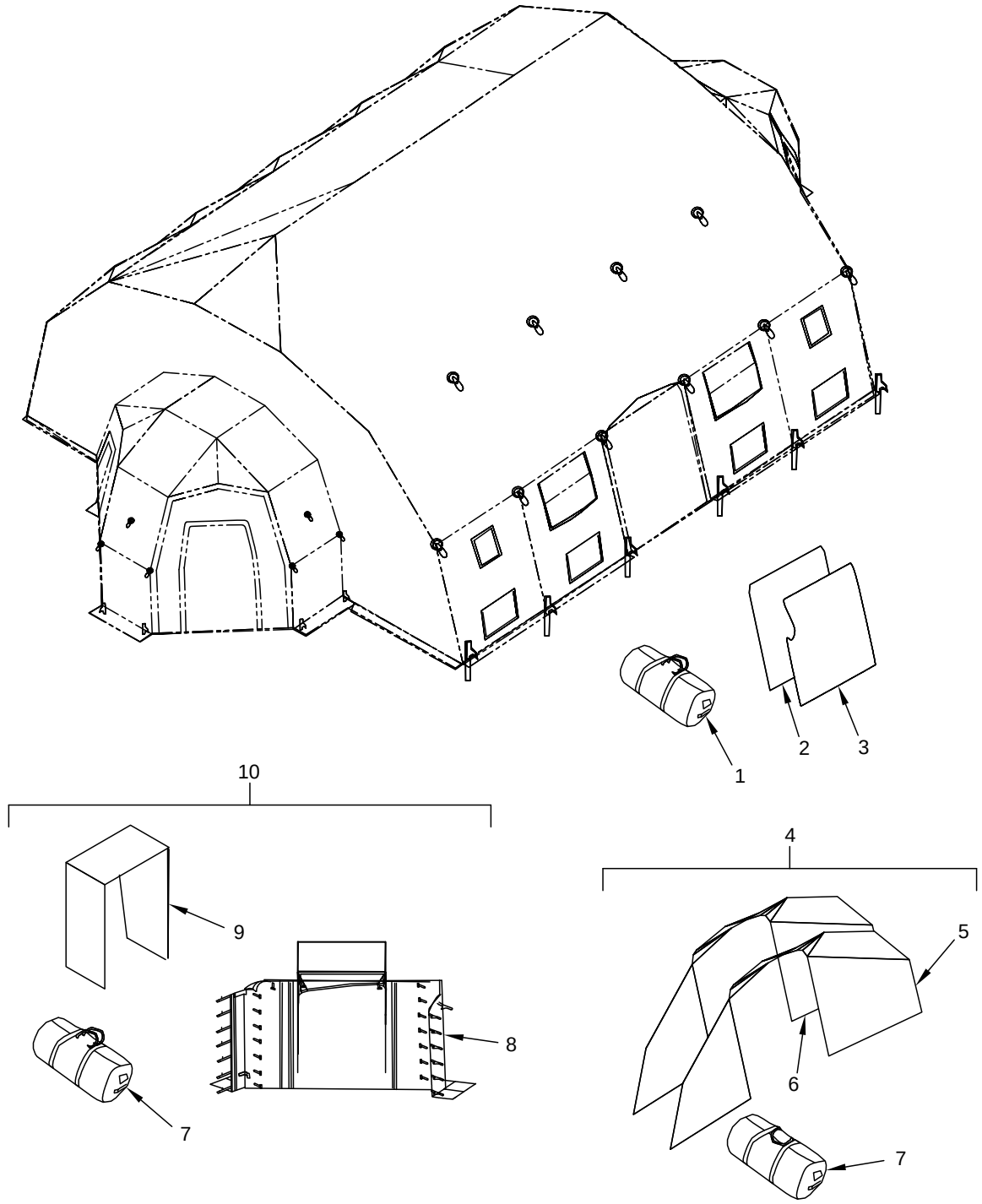


Figure 5 Shelter Doors and Connector Set, JA200300, JA200320

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					FIG. 5 SHELTER DOORS AND CONNECTOR SET, JA200300,JA200320	
1	PACZZ	2590-01-559-3248	0WFM3	JA201060	BAG,TRANSPORTATION	1
2	PACZZ	8340-01-580-4145	0WFM3	JS900420	DOOR,INTERIOR	2
3	PACZZ	8340-01-580-4146	0WFM3	JS900380	DOOR,EXTERIOR ..... UOC: 6FB	2
3	PACZZ		0WFM3	JS900400	DOOR,EXTERIOR ..... UOC: 6FC,	2
4	PACZZ		0WFM3	JA200260	CONNECTOR SET ..... UOC: 6FB	1
4	PACZZ		0WFM3	JA200270	CONNECTOR SET ..... UOC: 6FC	1
5	PACZZ		0WFM3	JS900320	BOOT,EXTERIOR..... UOC: 6FB	2
5	PACZZ		0WFM3	JS900340	BOOT,EXTERIOR..... UOC: 6FC	2
6	PACZZ		0WFM3	JS900360	BOOT,INTERIOR.....	2
7	PACZZ	2590-01-559-3307	0WFM3	JA201140	BAG,TRANSPORTATION	2
8	PACZZ		0WFM3	1006159	CONNECTOR SET ..... UOC: 6FB	1
8	PACZZ		0WFM3	1006160	CONNECTOR SET ..... UOC: 6FC	1
9	PACZZ		0WFM3	MXS1051W	CONNECTOR SET	1
10	PACZZ		0WFM3	SH520-0402G	CONNECTOR SET ..... UOC: 6FB	4
10	PACZZ		0WFM3	SH520-0402T	CONNECTOR SET ..... UOC: 6FC	4
					END OF FIGURE	

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J Shelter
DHS PART NUMBER INDEX

WORK IN PROGRESS

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

WORK IN PROGRESS

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

PARTS INFORMATION
J Shelter
NATIONAL STOCK NUMBER INDEX

WORK IN PROGRESS

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

WORK IN PROGRESS

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

CHAPTER 7

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE OF J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE
J Shelter
GENERAL INFORMATION

SCOPE

This work package is for guidance of those whose duty it is to render inoperable or destroy equipment which is in imminent danger of capture by an enemy.

AUTHORIZATION

Only division or higher commanders have the authority to order destruction of equipment. They may however, delegate this authority to subordinate commanders when the situation demands it.

REPORTING DESTRUCTION

Destruction of equipment will be reported through command channels.

METHODS OF DESTRUCTION

Choose methods of destruction which will cause such damage that it will be impossible to restore the equipment to a usable condition within the combat zone. The following methods of destruction may be used separately or in combination, depending on the type of equipment and the degree to which each method is used.

Self-Destruction

Built-in self-destruction devices should be set off even if the major item containing equipment with self-destruction devices is to be destroyed. These devices should be permitted to do their work at least partially before incendiaries or explosives (especially the latter) are set off. Currently, the J Shelter contains no built-in self-destruction devices.

Improper Operation

The short circuiting of a power source and the application of an over voltage to equipment are examples of improper operation. This method of destruction has a limited application to electronics material.

Fire

The starting of fires on or near electronic equipment is particularly useful in destroying predominantly nonmetallic components such as transistors, diodes, resistors, capacitors, switches, and printed circuit boards. Fires should be lit after setting off explosives and/or completing mechanical destruction. Fires within partially closed cabinets tend to be less effective than open fires, since a closed area does not allow sufficient oxygen necessary for an intense flame. Heat sources which do not require an air supply, such as thermite-based devices or incendiary grenades, are not subject to this limitation. The use of fire is associated with numerous hazards, including the possibility of disclosing positions which are under enemy visual or infrared surveillance.

Weapons Fire

The use of weapons fire is less desirable than mechanical destruction, and is practically useless against heavy gauge metal panels and metal castings. However, optics such as night observation equipment are easily destroyed by correctly aimed gunfire.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

Demolition (Explosives)

Explosives refer to TNT, plastic explosives, as well as fragmentation grenades. Explosives are most effective against structures and components which will not burn, or are too heavy or too strong to be easily demolished by mechanical means. The use of explosives has the disadvantage of possible disclosure of position when enemy forces are using sound-ranging-type equipment.

Mechanical Destruction

Mechanical destruction includes smashing electronic components, bending chassis or sub chassis, slashing cables and wiring, or any similar action. Dropping a weight on equipment and throwing lightweight equipment over a cliff are also examples of mechanical destructions. Sledges, hammers, axes or heavy tools are examples of the implements which can be used. Mechanical destruction should be completed before fires are lit.

Use of Natural Surroundings

The disposal or denial to the enemy of electronics material may be accomplished in the field by taking advantage of the natural surroundings and environment.

Submergence of equipment and repair parts under water (lakes, ponds, streams, etc), concealment by hiding material in caves or, preferably burial can be used effectively. Where the surrounding area does not lend itself to such disposal, widely dispersed scattering of material, preferably, into heavy underbrush, can serve as a denial or delaying measure in the event the area is recaptured.

CLASSIFIED EQUIPMENT

Classified equipment must be destroyed to such a degree as to prevent duplication by, or revealing means of operation or function to the enemy.

ASSOCIATED CLASSIFIED DOCUMENTS

Any classified documents, notes, instructions, or other written material pertaining to function, operation, maintenance, or employment, including drawings or parts lists, must be destroyed in a manner to render them useless to the enemy.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE
J Shelter
DESTRUCTION PROCEDURES

SCOPE

This work package is for guidance of those whose duty it is to render inoperable or destroy the J Shelter which is in imminent danger of capture by an enemy.

METHOD OF DESTRUCTION

Command decision, according to the tactical situation will determine when the using organization is to destroy a J Shelter. A destruction plan will be prepared by the using organization, unless one was prepared by a higher authority. For general vehicle destruction procedures, refer to TM 750-244-6, Procedures for Destruction of Tank Automotive Equipment to Prevent Enemy Use (U.S. Army Tank-Automotive and Artillery Command).

J Shelter EQUIPMENT DESTRUCTION PROCEDURES

The following procedures should be followed when time does not permit critical equipment to be destroyed individually.

Demolition/Explosives

WARNING

Personnel should stand clear of area being destroyed be weapons fire. Always use a weapon of a caliber sufficient to ensure enough penetration to achieve the desired damage and to eliminate the possibility of ricochet. Personnel unfamiliar with explosives should not set or detonate explosives.

The use of explosives has the disadvantage of possible disclosure of position.

The **J Shelter** can be destroyed using incendiary grenades, several rounds of properly aimed weapons fire, or a sufficient amount of explosives.

Use incendiary grenade by pulling pin and placing directly under J Shelter.

WARNING

Fires should be lit only in open areas. Avoid inhaling fumes from burning components.

Fire

Fires should be started after setting off explosives. Gasoline, kerosene, diesel, or oil may be used to destroy smaller components such as the J Shelter accessories.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

CHAPTER 8

SUPPORTING INFORMATION FOR J SHELTER

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

SUPPORTING INFORMATION
HP-4/3312
REFERENCES

SCOPE

This work package lists all field manuals, forms, military standards, technical manuals, and miscellaneous publications referenced in this manual

FIELD MANUALS

FM 3-5	NBC Decontamination
FM 4-25.11	First Aid
FM 21-305	Manual for the Wheeled Vehicle Driver

GOVERNMENT PUBLICATIONS

AR 25-2	Information Assurance
AR 700-138	Army Logistics Readiness and Sustainability
CECOM TR-98-6	Earth Grounding and Bonding Pamphlet
DA Form 2028	Recommended Changes to Publications and Blank Forms
DA Forms 2404 and 5988E	Equipment Inspection and Maintenance Worksheet
DA Form 2408-9	Equipment Control Record.
DA Form 7399	Survey/Decontamination Record
DA Form 7399-R	Survey/Decontamination Record
DA Form 7400	Record of Area/Equipment Survey
DA Form 7401	Radioactive Commodity Report
DA PAM 700-48	Handling Procedures for Equipment Contaminated with Depleted Uranium or Radioactive Commodities
DA PAM 700-138	Army Logistics Readiness and Sustainability
DA PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual
DA PAM 738-751	Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A)
DD Form 361	Transportation Discrepancy Report
SF 368	Product Quality Deficiency Report

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

TECHNICAL BULLETINS

TB 43-0134	Technical Bulletin Battery Disposition and Disposal
TB MED 507	Heat Stress Control and Heat Casualty Management

TECHNICAL MANUALS

TM 11-5820-1118-12&P	Operator and Unit Maintenance Manual (including Repair Parts and Special Tools List) MK-2551A/U (SWGS) Grounding Kit
TM 9-2330-392-14&P	Operator's, Unit, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) Trailer, Cargo: Light, 2-Wheel M1101 (2330-01-387-5443) EIC: CBC; Trailer, Cargo: Heavy, 2-Wheel M1102 (2330-01-387-5426) EIC: CBB; Chassis, Trailer: 2-Wheel (2330-01-387-5424) EIC: CCL
TM 750-244-2	Procedures for Destruction of Electronic Material to Prevent Enemy Use
TM 750-244-6	Procedures for Destruction of Tank Automotive Equipment to Prevent Enemy Use (US Army Tank-Automotive Command)

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

SUPPORTING INFORMATION
J SHELTER
MAC INTRODUCTION

INTRODUCTION

The Army Maintenance System MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field – includes two sub columns, Crew (C), and Maintainer (F).

Sustainment – includes two sub columns, Below Depot (H) and Depot (D).

The maintenance to be performed below depot and in the field is described as follows:

1. Crew maintenance. The responsibility of a using organization to perform maintenance on its assigned equipment. It normally consists of inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies. The replace function for this level of maintenance is indicated by the letter "C" in the third position of the SMR code. A "C" appearing in the fourth position of the SMR code indicates complete repair is possible at the crew maintenance level.

2. Maintainer maintenance. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "F" appearing in the third position of the SMR code. An "F" appearing in the fourth position of the SMR code indicates complete repair is possible at the field maintenance level. Items are returned to the user after maintenance is performed at this level.

3. Below depot sustainment. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "H" appearing in the third position of the SMR code. An "H" appearing in the fourth position of the SMR code indicates complete repair is possible at the below depot sustainment maintenance level. Items are returned to the supply system after maintenance is performed at this level.

4. Depot sustainment. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "D" or "K" appearing in the third position of the SMR code. Depot Sustainment maintenance can be performed by either depot personnel or contractor personnel. A "D" or "K" appearing in the fourth position of the SMR code indicates complete repair is possible at the depot sustainment maintenance level. Items are returned to the supply systems after maintenance is performed at this level.

The tools and test equipment requirements table (immediately following the MAC) lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks table (immediately following the tools and test equipment requirements) contains supplemental instructions and explanatory notes for a particular maintenance function.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes scheduled inspection and gauging and evaluation of cannon tubes.

2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e. load testing of lift devices and hydrostatic testing of pressure hoses.

3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:

   a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.

   b. Repack. To return item to packing box after service and other maintenance operations.

   c. Clean. To rid the item of contamination.

   d. Touch up. To spot paint scratched or blistered surfaces.

   e. Mark. To restore obliterated identification.

4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.

5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurements. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

8. Paint (ammunition only). To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.

9. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. “Replace” is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.

10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

NOTE

The following definitions are applicable to the “repair” maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

11. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

12. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to “Maintenance Functions” outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as man-hours in whole hours or decimals) in the appropriate sub column. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

Field:
C Crew maintenance
F Maintainer maintenance

Sustainment:
L Specialized Repair Activity (SRA)
H Below depot maintenance
D Depot maintenance

NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by a work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

Explanation of Columns in Tools and Test Equipment Requirements

Column (1) Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) Nomenclature. Name or identification of the tool or test equipment.

Column (4) National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) Tool Number. The manufacturer's part number.

Explanation of Columns in the Remarks

Column (1) Remarks Code. The code recorded in column (6) of the MAC.

Column (2) Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

SUPPORTING INFORMATION
J SHELTER
MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for J Shelter.

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			FIELD			SUSTAINMENT			
			CREW	SERVICE	FIELD	BELOW DEPOT	DEPOT	TOOLS AND TEST EQUIPMENT REF CODE	REMARKS CODE
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	C	O	F	H	D		
	TENT	INSPECT	0.20						A
		REPAIR	0.50						E
		REPLACE		0.50					
		REPAIR		0.50				1	D
		REPAIR					*		Y
	TENT, END CAP	INSPECT	0.20						A
		REPAIR	0.50					1	E
		REPLACE		0.50					
		REPAIR		0.50					F
	TENT, ROOF AND SIDES	INSPECT	0.10						A
		REPAIR	0.50					1	E
		REPLACE		0.70				1	
		REPAIR		0.70				1	D
	BLADDER	INSPECT	0.10						
		REPAIR	0.15						G
	INTERNAL LOAD SUPPORTS	INSPECT	0.10						
		REPAIR		0.70				1	D
	BLOWER ASSEMBLY	INSPECT	0.10						A
		TEST	0.10						

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

Table 2. Tools and Test Equipment for J Shelter.

TOOL OR TEST EQUIPMENT REF. CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
1	O	TOOL KIT, GENERAL MECHANIC'S	5180-01-483-0249	SC-5180-95-B47

Table 3. Remarks for J Shelter.

REMARKS CODE	REMARKS
A	Visual inspection of assembly and components for damage, loose or missing hardware.
B	Inspect shelter for proper frame-to-ground connection.
C	Preventive Maintenance Checks and Services (PMCS).
D	Repair by replacement of assemblies, subassemblies, and components.
E	Repair at crew level limited to emergency repairs using items in repair kit.
F	Sustainment Maintenance performed by Field Service Representatives or Depot Maintenance Teams.
G	Repair bladder using emergency repair kit supplied with end-item.

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

SUPPORTING INFORMATION
J Shelter
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

INTRODUCTION

Scope

This work package lists COEI and BII for the Small Command Post Shelter to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists:

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the shelter. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the shelter in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the shelter during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns in the COEI List and BII List

Column (1) Illus Number. Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (4) Usable on Code. When applicable, gives you a code if the item you need is not the same for different models of equipment.

Code	Used on
NA	Shelter, Green
NA	Shelter, Tan

Column (5) (U/I). Unit of Issue (UI) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr. Indicates the quantity required.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

COMPONENTS OF END ITEM – Continued

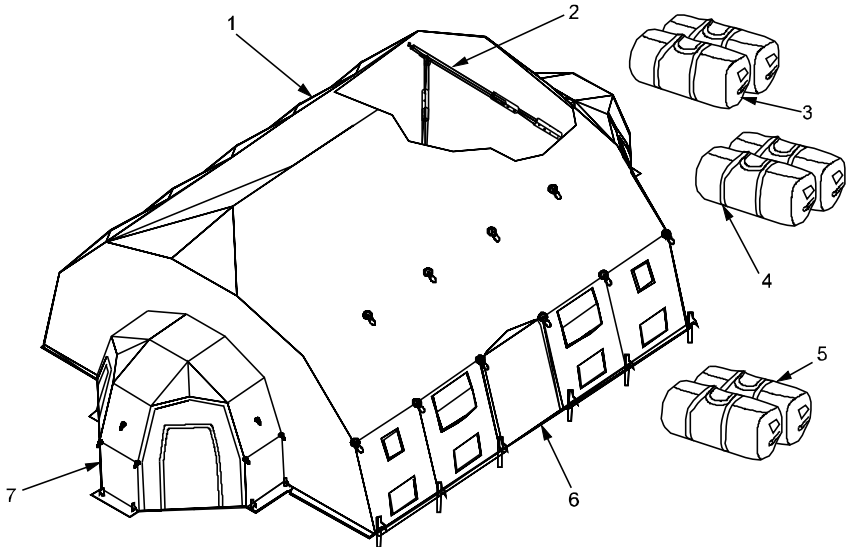


Table 1. Components of End Item List - Continued.

(1) Illus Number	(2) National Stock Number	(3) Description, Part Number/(CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
1		SOFTWALL SHELTER JA201420, (0WFM3)	6FB	EA	1
		SOFTWALL SHELTER JA201400, (0WFM3)	6FC	EA	1
2		INTERNAL LOAD SUPPORT SH490-9004, (0WFM3)	6FB, 6FC	EA	4
3		FACEPLATE, INTERIOR JA200160, (0WFM3)	6FB, 6FC	EA	2
4		T-PLATE, EXTERIOR JA200180, (0WFM3)	6FB	EA	2
		T-PLATE, EXTERIOR JA200200, (0WFM3)	6FC	EA	2
5		DOOR, INTERIOR JS900420, (0WFM3)	6FB, 6FC	EA	2
		DOOR, EXTERIOR, GREEN JS900380, (0WFM3)	6FB	EA	2
		DOOR, EXTERIOR, TAN JS900400, (0WFM3)	6FC	EA	2
6	8340-01-487-6536	FLOOR 202150, (58536)	6FB, 6FC	EA	1
7		END CAP SHELTER SH201-0001G, (0WFM3)	6FB	EA	2
		END CAP SHELTER SH201-0001T, (0WFM3)	6FC	EA	2

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

COMPONENTS OF END ITEM – Continued

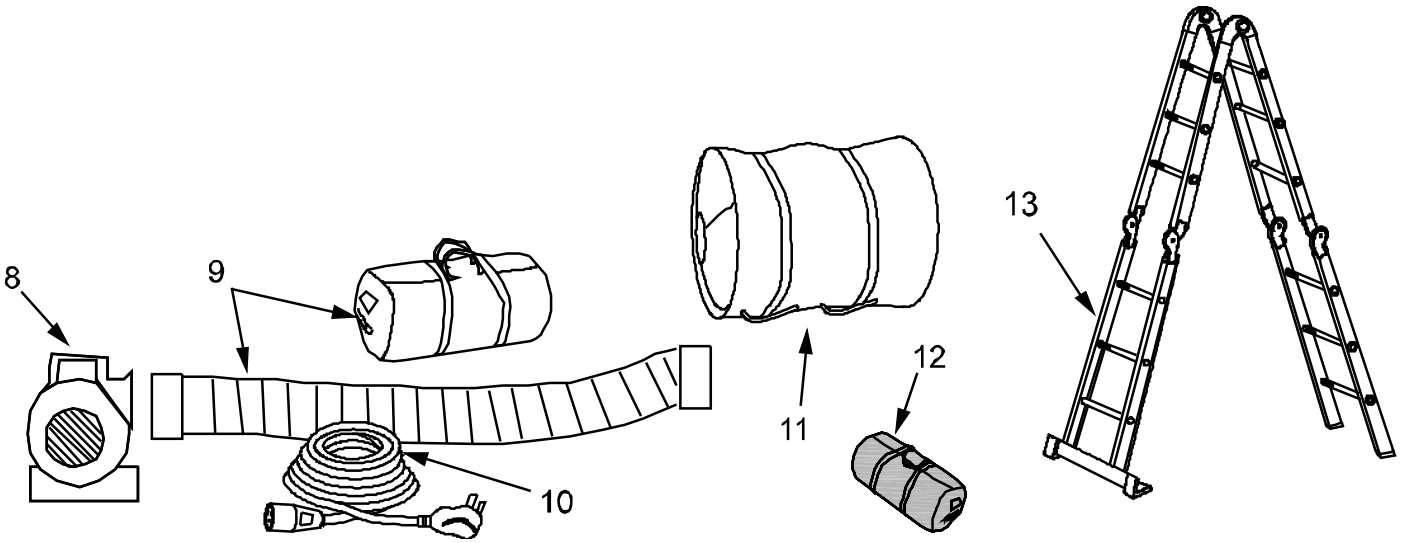


Table 1. Components of End Item List.

(1) Illus Number	(2) National Stock Number	(3) Description, Part Number/(CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
8		FAN ASSEMBLY CENTRIFUGAL 23-9531, (0NT93)	6FB, 6FC	EA	1
9		DUCT ASSEMBLY JA201162, (0WFM3)	6FB, 6FC	EA	1
10		CABLE, SPECIAL PURPOSE, ELECT., PWR T295112, (0WFM3)	6FB, 6FC	EA	1
11	8340-01-488-7461	BLADDER JA200360, (OWFM3)	6FB, 6FC	EA	1
12		REPAIR KIT JA200570, (0WFM3)	6FB	EA	1
13		LADDER JA201620, (OWFM3)	6FB, 6FC	EA	1

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

BASIC ISSUE ITEMS

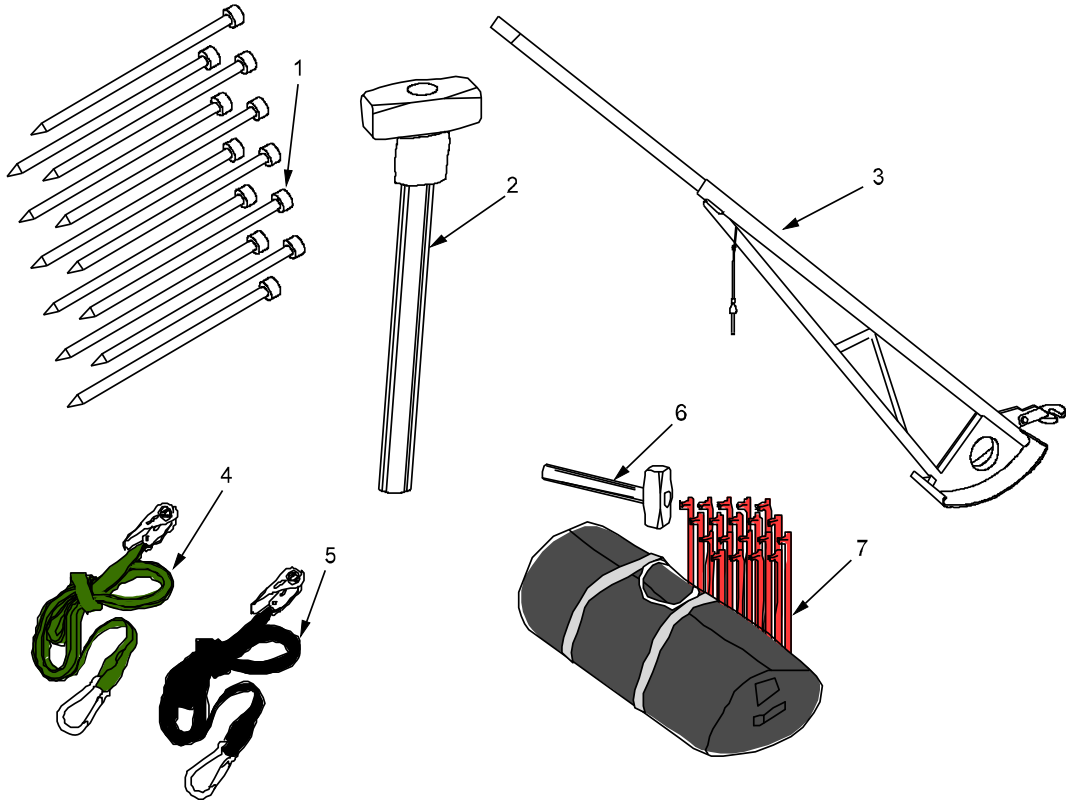


Table 2. Basic Issue Items

(1) Illus Number	(2) National Stock Number	(3) Description, Part Number/(CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr
1		STAKE HOLD DOWN JA200820, (0WFM3)	6FB, 6FC	EA	32
2		HAMMER, SLEDGE,#10 JA201020, (OWFM3)	6FB, 6FC	EA	2
3		STAKE PULLER JA201040, (0WFM3)	6FB, 6FC	EA	1
4		WIND LINES, HIGH JS900500, (0WFM3)	6FB, 6FC	EA	8
5		WIND LINES, LOW JS900520, (0WFM3)	6FB, 6FC	EA	12
6		HAMMER A600650, (0WFM3)	6FB, 6FC	EA	1
7		STAKE HOLD DOWN A601250, (0WFM3)	6FB, 6FC	EA	1

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

SUPPORTING INFORMATION
J Shelter
ADDITIONAL AUTHORIZATION LIST (AAL)

INTRODUCTION

Scope

This work package lists additional items you are authorized for the support of the **J Shelter**.

General

This list identifies items that do not have to accompany the **J Shelter** and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

Explanation of Columns in the AAL

Column (1) National Stock Number (NSN) - Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) Description, Part Number/(CAGEC) - Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (3) Usable on Code - When applicable, gives you a code if the item you need is not the same for different models of equipment.

Code	Used on

Column (4) Unit of Issue (U/I) - Indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (1).

Column (5) Qty Recm - Indicates the quantity recommended.

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

ADDITIONAL AUTHORIZED LIST ITEMS

Table 1. Additional Authorized List.

(1) National Stock Number (NSN)	(2) Description, Part Number/(CAGEC)	(3) Usable on Code	(4) U/I	(5) Qty Recm
8340-01-537-8797	BOOTING COLLAR,VEHICLE,GREEN FOR 1068 SH540-0205G, (0WFM3)	6FB	EA	A/R
8340-01-537-8793	BOOTING COLLAR,VEHICLE,TAN FOR 1068 SH540-0205T, (0WFM3)	6FC	EA	A/R
8340-01-537-8740	BOOT WALL, ,GREEN FOR COMMAND POST SYSTEM,MODULAR, SH540-0001G, (0WFM3)	6FB	EA	A/R
8340-01-537-8738	BOOT WALL, ,TAN FOR COMMAND POST SYSTEM,MODULAR, SH540-0001T, (0WFM3)	6FC	EA	A/R
8340-01-537-8769	BOOTING COLLAR,VEHICLE,GREEN FOR V1-V5 SH540-0208G, (0WFM3)	6FB	EA	A/R
8340-01-537-8767	BOOTING COLLAR,VEHICLE,TAN FOR V1-V5 SH540-0208T, (0WFM3)	6FC	EA	A/R
CONNECTOR SET(s), TMSS-LRG				
	CONNECTOR SET, GREEN, MXS1051G, (0WFM3)	6FB	EA	A/R
	CONNECTOR SET, TAN, MXS1051T, (0WFM3)	6FC	EA	A/R
	CONNECTOR SET, WHITE MXS1051W, (0WFM3)	6FB, 6FC	EA	A/R
CONNECTOR SET(s), CPP RWS				
	BOOTWALL, CONNECTOR SET,GREEN, MXA1040G, (0WFM3)	6FB	EA	A/R
5411-01-565-5225	HARDWARE, for BOOTWALL, CONNECTOR SET, GREEN, MXA1041G, (0WFM3)	6FB	EA	A/R
	BOOTWALL, CONNECTOR SET,TAN, MXA1041T, (0WFM3)	6FC	EA	A/R
	HARDWARE, for BOOTWALL, CONNECTOR SET, TAN, MXA1041T, (0WFM3)	6FC	EA	A/R

END OF WORK PACKAGE

SUPPORTING INFORMATION
J Shelter
EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

This work package lists expendable and durable items that you will need to operate and maintain the J Shelter. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), CTA 50-909, Field and Garrison Furnishings and Equipment, or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Items List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., sealing compound (WP 0116, Item 50)).

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item (C = Operator/Crew; O = Unit/AMC, F= Direct Support/ASB).

Column (3) National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) Item Name, Description, Part Number/(CAGEC). This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parenthesis).

Column (5) (U/I). Unit of Issue (U/I) code shows the physical measurement or count of the item, such as gallon, dozen, gross, etc.

EXPENDABLE AND DURABLE ITEMS LIST

Table 1. Expendable and Durable Items List.

(1) Item Number	(2) Level	(3) National Stock Number	(4) Item Name, Description, Part Number/(CAGEC)	(5) U/I
1	F	7920-00-291-5815	Brush, Wire D-1416	EA
2	C		Blade, hack saw 4202A18, (39428)	PG
3	C		Duct Tape, Green, 2 inch x 12 yards[1, 3] A601350, (0WFM3)	ROLL
4	C		Duct Tape, Tan, 2 inch x 12 yards[2,4] A601360, (0WFM3)	ROLL
5	C		Fabric, Self-Adhesive, Green[1,3] C424017, (0WFM3)	EA
6	C		Fabric, Self-Adhesive, Tan[2,4] C424018, (0WFM3)	EA
7	C		Fabric, Self-Adhesive, White1,2,3,4 C424019, (0WFM3)	EA
8	C		Sleeve, Repair1, 2,3,4 A601750, (0WFM3)	SL

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.

Table 2. Shelter Repair Kit Items

(1) Item Number	(2) Level	(3) National Stock Number	(4) Item Name, Description, Part Number/(CAGEC)	(5) U/I
1	C		Hack Saw[1, 2,3,4] A601451, (0WFM3)	EA
2	C		Ratchet[1, 2,3,4] JS900680, (0WFM3)	EA
3	C		Scissors, 4 inch[1, 2,3,4] A601051, (0WFM3)	EA
4	C		Wrench, Spanner 3/16 inch[1, 2,3,4] A601150, (0WFM3)	EA

END OF WORK PACKAGE

This document contains information proprietary to DHS Systems LLC and is intended solely for use by its customers. No portion of this document may be reproduced for release to a third party without written consent of DHS Systems LLC.